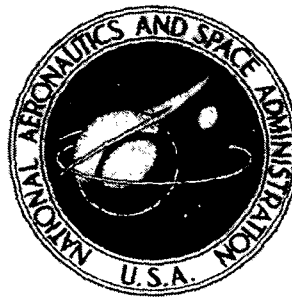


**NASA TECHNICAL
MEMORANDUM**



NASA TM X-1798

NASA TM X-1798

**EXPERIMENTAL DATA FOR TWO
1400-FEET-PER-SECOND TIP SPEED
COMPRESSOR ROTORS OPERATED
WITH INLET FLOW DISTORTIONS**

by Everett E. Bailey and Robert S. Ruggeri

*Lewis Research Center
Cleveland, Ohio*

**EXPERIMENTAL DATA FOR TWO 1400-FEET-PER-SECOND TIP SPEED
COMPRESSOR ROTORS OPERATED WITH INLET FLOW DISTORTIONS**

By Everett E. Bailey and Robert S. Ruggeri

**Lewis Research Center
Cleveland, Ohio**

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

For sale by the Clearinghouse for Federal Scientific and Technical Information
Springfield, Virginia 22151 - CFSTI price \$3.00

ABSTRACT

Data for two 1400-feet-per-second tip speed rotors operated with radial and circumferential flow distortions are presented for a range of equivalent rotor speeds from 50 to 100 percent. Rotor design pressure ratios were 1.6 and 1.76. Data are presented mostly in tabular form, and include radial and circumferential distributions of inlet and discharge total pressures and temperatures, and various wall static pressure measurements along the hub and outer casing. Uniform inlet flow data are included for comparison. Observations of flow conditions at near-stall, with and without distortion, are made. The desirability of comparing distortion data at zero stall margin is discussed.

EXPERIMENTAL DATA FOR TWO 1400-FEET-PER-SECOND TIP SPEED COMPRESSOR ROTORS OPERATED WITH INLET FLOW DISTORTIONS

by Everett E. Bailey and Robert S. Ruggeri

Lewis Research Center

SUMMARY

Detailed measurements from two high tip speed compressor rotors operated with radial and circumferential inlet airflow distortion are presented. Both rotors had a blade tip diameter of 36.5 inches, a hub-tip ratio of 0.5, a design tip speed of 1400 feet per second, and a design flow rate of 215.5 pounds per second. The primary difference in the rotors was in the design blade loading levels which resulted in design pressure ratios of 1.6 and 1.76. The rotors were operated without inlet guide vanes or stator vanes. Data were obtained over a range of equivalent rotor speeds from 50 to 100 percent. At each speed, weight flow was varied from a maximum value to that which resulted in rotor stall.

The data are presented in tabular form primarily, and include radial and circumferential distributions of inlet and discharge total pressures and temperatures, and various wall static pressure measurements along the hub and outer casing. Corresponding data obtained with uniform inlet flow are included for comparison. Observations of flow conditions just prior to onset of rotor stall, with and without inlet flow distortions, are made. The results indicated that the levels of blade loading in the tip region with radial distortion were very nearly the same as those noted for undistorted inlet flow. However, all other blade sections operated at significantly reduced levels of loading, compared with those for uniform inlet flow, when radial distortion was present. With circumferential inlet airflow distortion, all blade sections experienced a wide variation in blade loading during each revolution. The maximum values of loading in the blade tip region exceeded the corresponding near-stall levels noted with either uniform inlet flow or with radial distortion. Attainment of these higher loadings, without apparent rotating stall, is attributed in part to flow angularity at the rotor inlet and to the relatively short times required for a given blade to traverse the distorted region.

Analysis indicates the desirability of comparing distortion data at the rotor stall condition (zero-percent stall margin). The data presented herein are in addition to overall performance results (with and without distortion) previously reported.

INTRODUCTION

Advanced aircraft jet engine fans and compressors encounter inlet airflow distortions under some operating conditions. These airflow distortions can appear as nonuniformities with respect to total pressure (or velocity), total temperature, and flow angularity. The resulting degradation in engine performance limits the operational flight envelope and maneuverability of the aircraft. The degree of performance degradation depends primarily on the extent to which inlet airflow distortions affect compressor operation.

At present there is no generally available method that adequately relates changes in compressor performance (pressure ratio, stall margin, etc.) to a given degree and type of airflow distortion. Predictions of airflow distortion effects are usually made on the basis of previous experience with compressors of similar design. However, such information for compressors incorporating the increased blade speeds and higher blade loadings used in recent years is not available. Thus a need exists for experimental data on the effects of airflow distortion for compressors of this type.

An experimental study to determine the performance of two compressor rotors designed for high Mach numbers relative to the blading has been reported in references 1 to 3. Both rotors had a blade tip diameter of 36.5 inches, a hub-tip ratio of 0.5, a design blade tip speed of 1400 feet per second, and a design equivalent weight flow of 215.5 pounds per second. The primary difference was in the design total pressure ratios resulting from differences in blade loading levels. The rotors operated without stator vanes or inlet guide vanes. As part of this experimental study, performance measurements were made with both radial and circumferential distortion of the inlet flow. The effects on compressor overall performance are reported in references 2 and 3 along with blade element data.

The objective of this report is to present detailed data obtained with the high Mach number rotors of references 2 and 3 operated with radial and circumferential inlet airflow distortions. Corresponding data obtained with undistorted inlet flow are included for comparison. The basic data presented were obtained as part of a NASA contract study and are in addition to the overall performance results reported in the previously mentioned references. A few specific observations illustrate the use of these data to indicate changes in flow and blade loading that occur with inlet flow distortions as well as the need for more complete flow measurements.

APPARATUS

Test Rotors

The test rotors had the same design flow rate of 215.5 pounds per second but design pressure ratios of 1.6 and 1.76. Design details for both rotors, as well as design considerations that led to the selection of the particular blade shapes used are presented in reference 1. The pertinent design parameters for the rotors (designated herein and in refs. 1 to 3 as rotor 1B and rotor 2B) are listed in table 1.

The outer casing and hub contours used for each rotor are shown in figure 1. For both rotors, multiple circular-arc blade shapes were used for 40 percent of span as measured from the tip, and double circular-arc sections for the remaining portion of the blade. The camber line, pressure surface, and suction surface of a multiple circular arc blade section are each composed of two circular arcs mutually tangent at their junction point. The supersonic-flow portion of the blade was selected to have the minimum camber consistent with flow-choking limitations. Detailed blade design data for rotor 1B and rotor 2B are presented in reference 1.

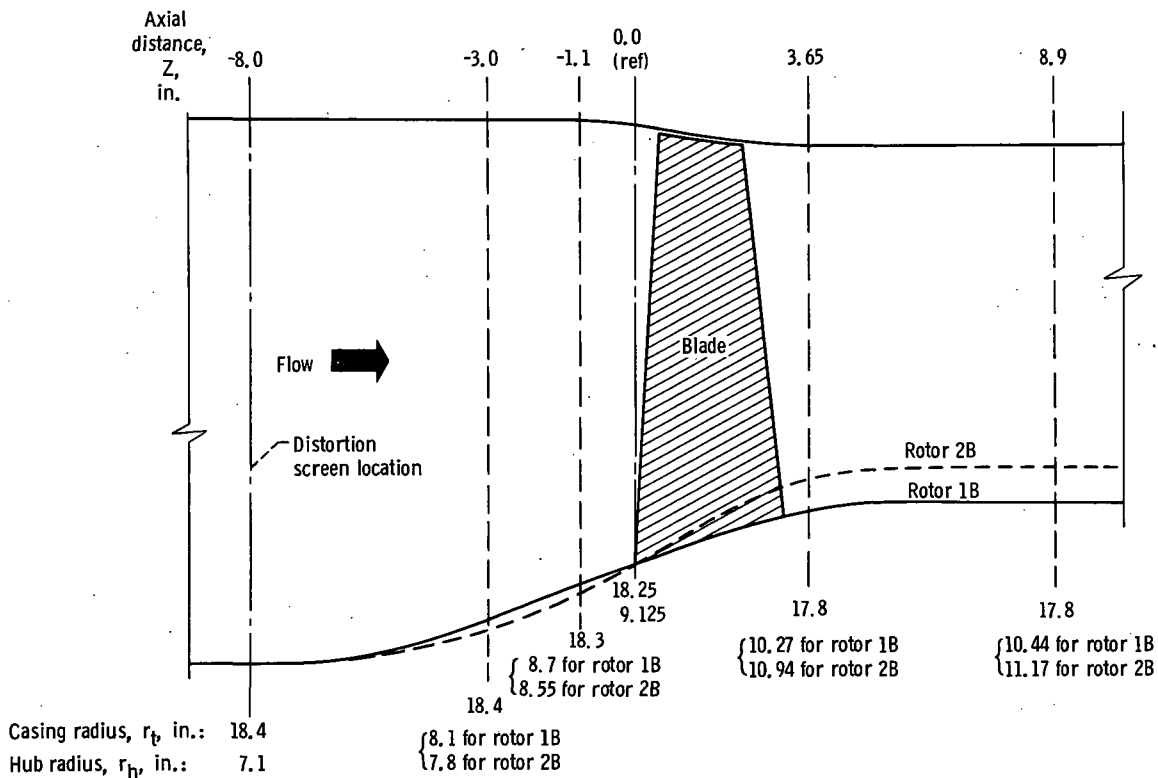


Figure 1. - Flow annuli and instrumentation locations.

A description of the facility in which the rotors were tested is presented in reference 2.

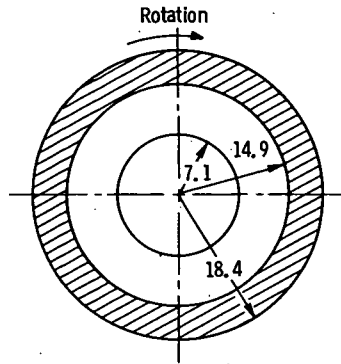
Instrumentation

Since the instrumentation used to obtain test information such as blade element data, boundary layer surveys, and rotating stall data is reported in detail in references 2 and 3, only that instrumentation utilized to evaluate radial and circumferential airflow distortion effects is discussed herein.

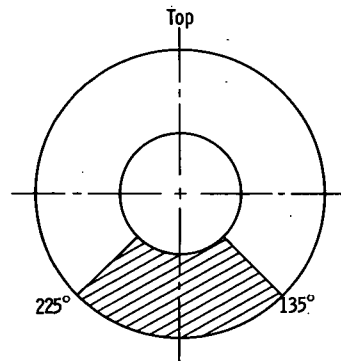
Measurements of static and total pressures, and total temperatures were made at one or more of the four instrumented stations shown in figure 1. Casing and hub wall static pressures were measured at five circumferentially spaced locations at each of the instrumented stations corresponding to axial locations of $Z = -1.1$, 3.65 , and 8.9 inches for rotor 1B, and at $Z = -1.1$ and 3.65 inches for rotor 2B (see fig. 1). Compressor inlet and discharge total pressures were measured by means of four multiple-tube rakes spaced circumferentially at Z locations of -3.0 and 8.9 inches. Similarly, discharge total temperatures were measured by four multiple-probe rakes located at station $Z = 8.9$ inches. The circumferential and radial location of each measurement (which differed for the two rotors) is indicated in the data tables subsequently presented. Design and fabrication details of instrumentation used in the rotor 1B and rotor 2B tests are presented in references 2 and 3, respectively.

Distortion Screens

The screens used for both the radial and circumferential distortion studies were mounted about 8 inches upstream of the rotors (fig. 1). The radial distortion screen covered the outer 40 percent of the inlet annulus area and the circumferential screen covered the lower 90° arc of the annulus as shown in figure 2. Both screens were 20 mesh with 0.016-inch wire diameter; each was supported by a coarse screen having a 0.092-inch wire diameter with 0.75-inch spacings. At design speed, the value for $(P_{\max} - P_{\min})/P_{\max}$ was approximately 0.2; where P_{\max} and P_{\min} represent the average total pressure in the undistorted region and in the distorted region, respectively.



(a) Radial. (All dimensions in inches.)



(b) Circumferential.

Figure 2. - Extent and location of distortion screens (looking upstream).

RESULTS

Overall Performance

The overall performance obtained for both rotors, with and without distortions, is presented in figures 3 and 4. The compressor maps shown for rotor 1B (fig. 3) and rotor 2B (fig. 4) are from references 2 and 3, respectively. Data reduction procedures, as well as the test procedures used to develop the performance maps of figures 3 and 4, are described in references 2 and 3.

Overall performance data of figures 3 and 4 are also presented in tabular form in table 2 (rotor 1B) and table 3 (rotor 2B). For easy reference, the reading numbers listed in tables 2 and 3 are identical to those of references 2 and 3 and are used herein to identify the overall performance results with specific pressure and temperature data presented in the following section.

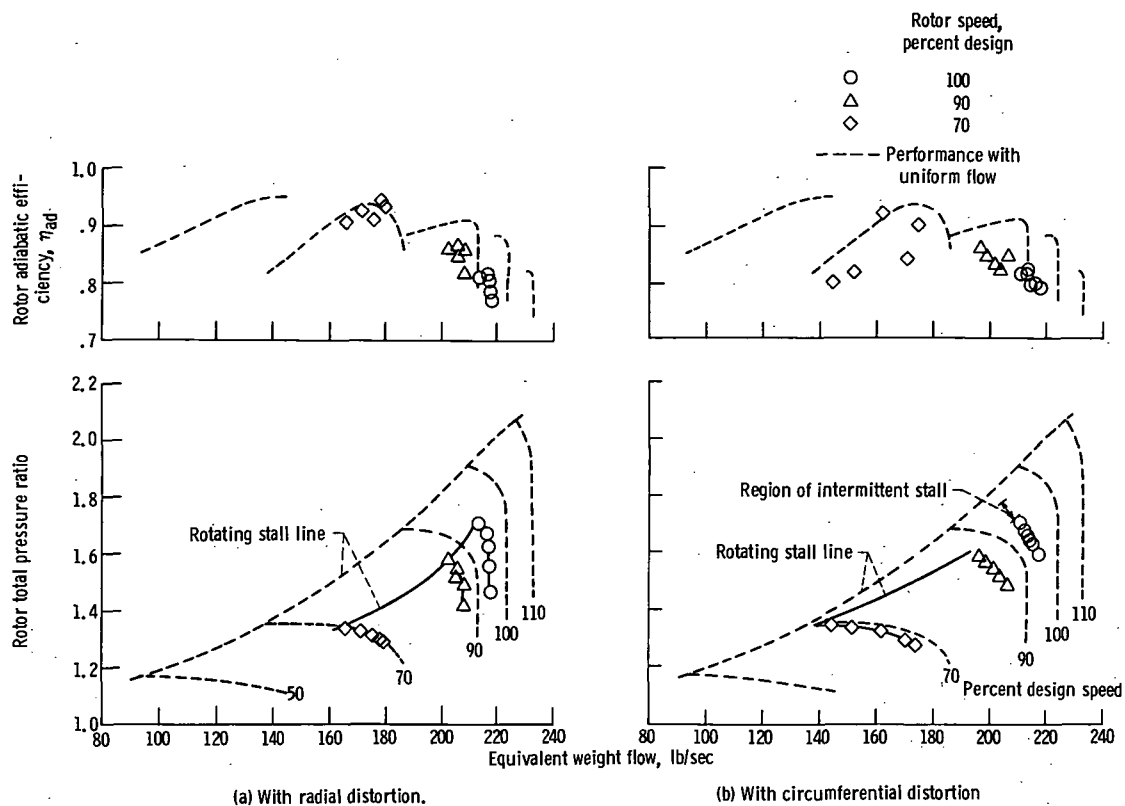


Figure 4. - Rotor 2B overall performance with and without inlet flow distortion.

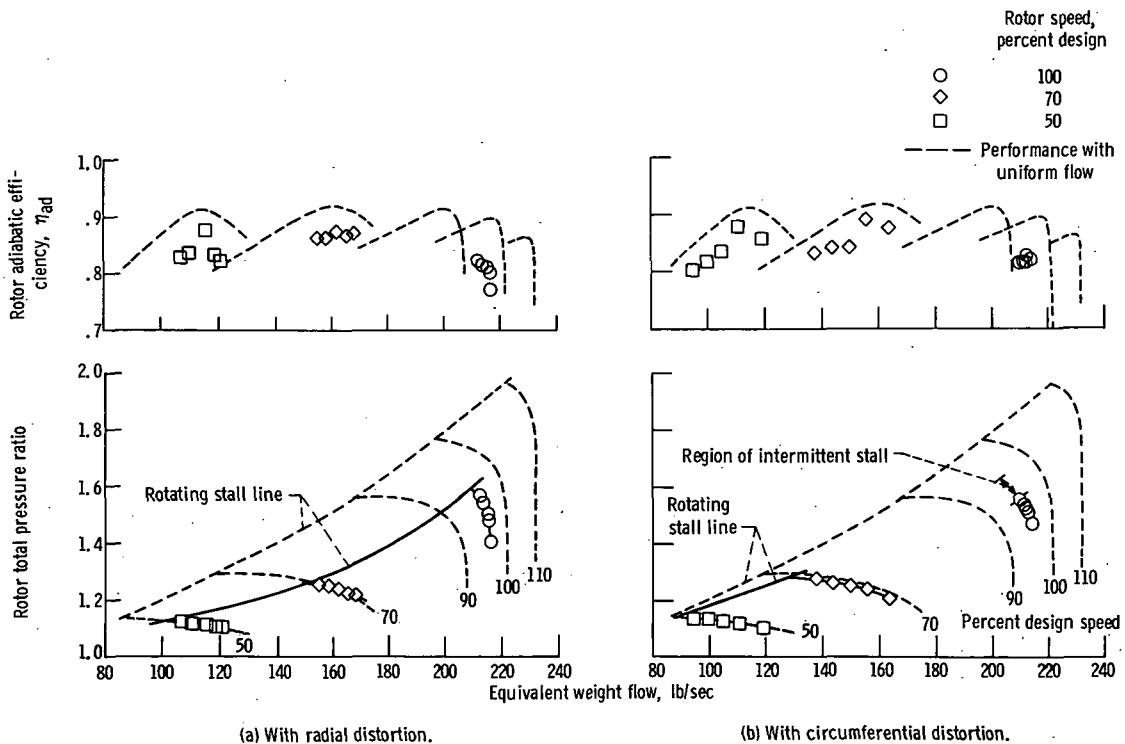


Figure 3. - Rotor 1B overall performance with and without inlet flow distortion.

Specific Pressure and Temperature Data

Locally measured values of casing and hub wall static pressure, rotor inlet and discharge total pressure, and discharge total temperature are presented in tables 4 to 107. The data have all been adjusted to equivalent values corresponding to standard inlet conditions of pressure and temperature through use of the conventional parameters of θ and δ where $\theta = T(^{\circ}\text{R})/518.688^{\circ}\text{R}$ and $\delta = P(\text{psia})/14.696\text{ psia}$. Circumferential locations are all with respect to the top of the rotor (0°) as measured clockwise looking upstream (which is also the direction of rotation). With undistorted inlet flow, the measurements indicated that an essentially constant total pressure existed at the rotor inlet ($Z = -3.0\text{ in.}$) for both rotors (i.e., equivalent 14.696 psia) and thus no values of equivalent inlet total pressure are presented for this condition. The presence of an asterisk in any of the tables 4 to 107 denotes that the measured value fell outside the predetermined acceptable range of data scatter; and, therefore, these data points are excluded herein as well as in the data of references 2 and 3.

DISCUSSION

The degradation in overall performance due to flow distortion (see figs. 3 and 4) reflects changes in the local flow field throughout the rotor. Attempts to relate rotor performance with the degree and extent of inlet airflow distortion should consider these local effects. The tabulated data permit a partial evaluation of these local effects for the two high tip speed rotors discussed. Several examples of radial and circumferential variations of measured data are presented in figure 5. Distributions of inlet and discharge total pressure, and discharge total temperature with uniform inlet airflow (fig. 5(a)), with radial distortion (fig. 5(b)), and with circumferential distortion (figs. 5(c) to (e)) are presented for rotor 1B operated at design equivalent speed. Data are presented for rotor operation at maximum flow, near peak efficiency, and near-stall. For all data presented, compressor stall implies the onset of rotating stall (as opposed to surge) determined from hot-wire anemometer measurements.

The data for uniform and radially distorted flow (figs. 5(a) and (b)) show that rotor discharge temperatures and pressures steadily increase for all blade elements as weight flow is reduced. At the near-stall operating point (figs. 5(a) and (b)), one or more of the blade elements are operating very close to a stalled condition. An examination of the circumferential distortion data of figures 5(c) to (e) indicates similar trends for elements in the blade tip region; but more importantly, these data also illustrate the large circumferential variations in discharge total temperatures and pressures incurred with

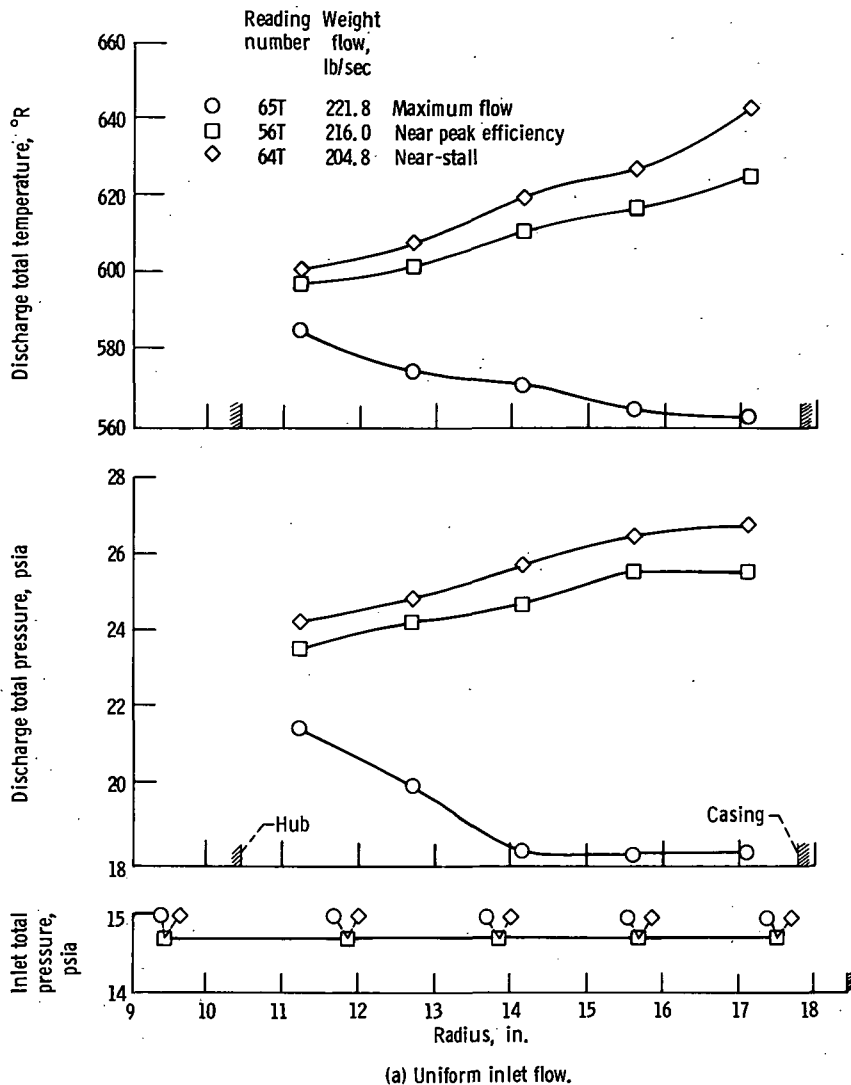
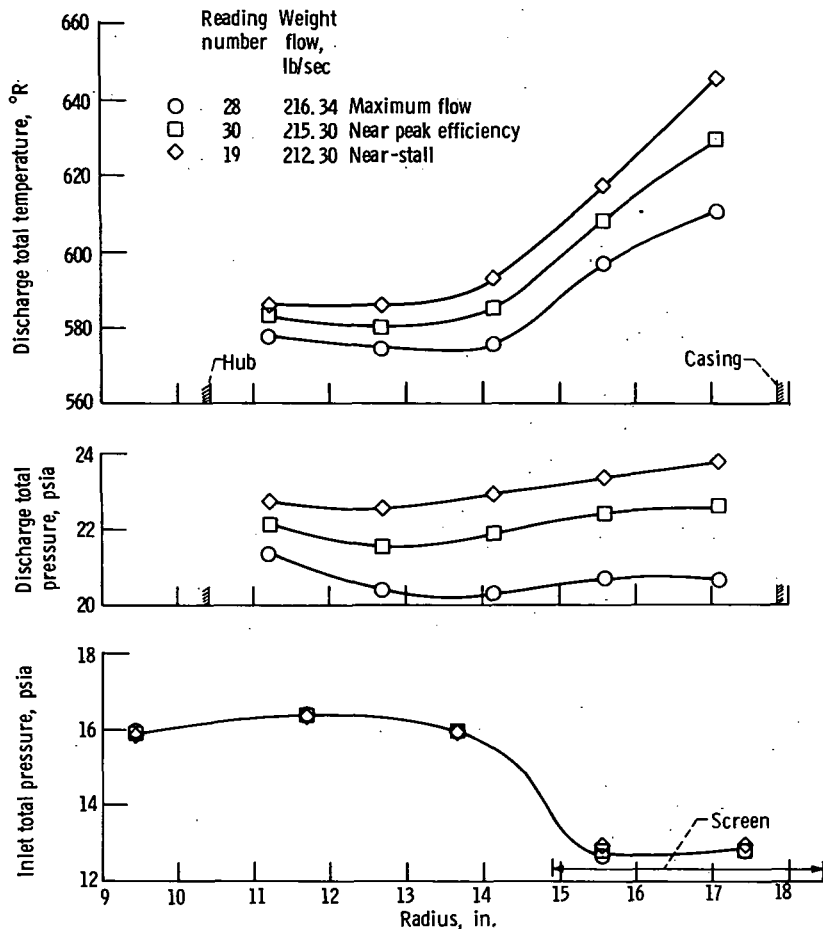


Figure 5. - Distributions of equivalent total pressure and total temperature for rotor 1B at 100 percent design equivalent speed.

circumferential inlet flow distortion. It is apparent in data analysis that measurements at only four circumferential locations are not sufficient to adequately define the flow conditions entering or leaving the rotor blade row.

One obvious limit to the range of operation for compressor rotors is rotor stall. Thus the flow conditions just prior to stall is of major interest; in particular, possible correlations of local flow conditions when operating with and without inlet flow distortions. Although a complete evaluation of this phenomenon is not possible from the limited data presented, some observations based on these local conditions can be made.

Because the inlet total temperature was constant both radially and circumferentially with and without distortion, the discharge total temperature plots of figure 5 may be

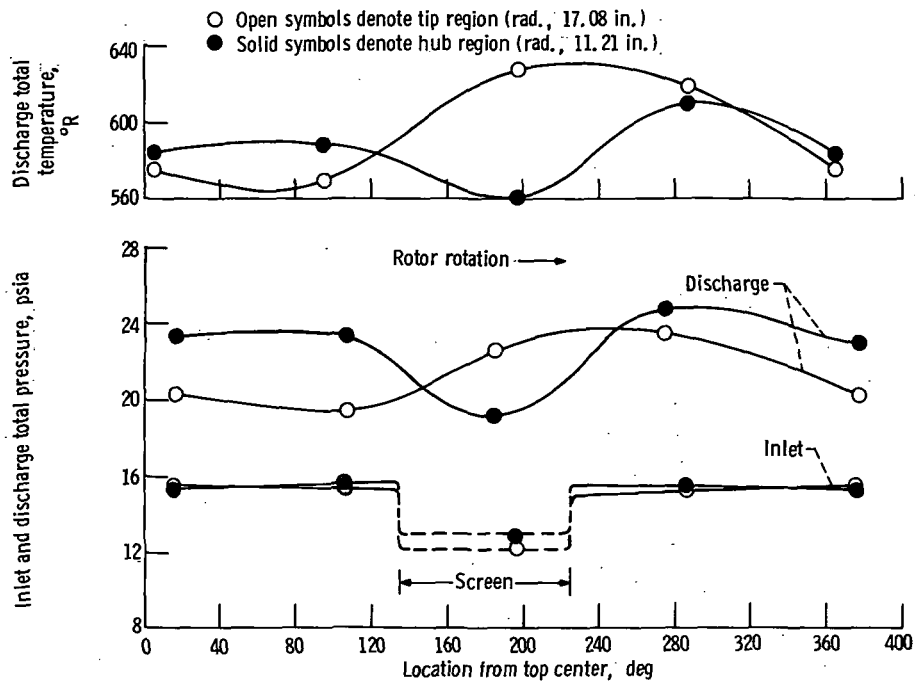


(b) Radial distortion.

Figure 5. - Continued.

regarded as plots of temperature rise across the rotor. Temperature rise relates directly to energy addition through the rotor and is indicative of blade loading for a given blade element at a given speed. Thus for the data of figure 5, any change in discharge temperature is analogous to a change in blade loading. The discharge temperatures for near-stall conditions with uniform flow (fig. 5(a)), therefore, represent the level of blade loading obtained for the various elements just prior to the initiation of stall. Sufficient information is not available from figure 5(a) to determine which element stalled first. Reference 4 indicates that full-span stalls were apparent at design speed, but that the magnitude of the flow deficit in the stalled region was less for those elements at radii less than midspan.

For the radial distortion case at near-stall conditions (fig. 5(b)), the discharge temperature for the blade tip element is essentially the same as that recorded with uniform inlet flow near stall. Except for the tip region, the discharge temperatures for all

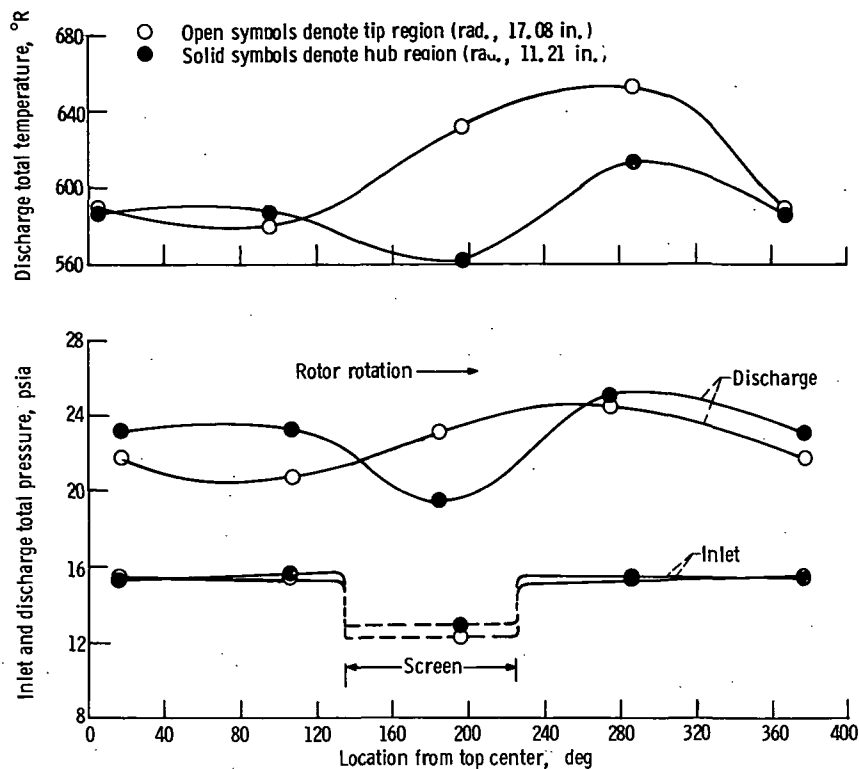


(c) Circumferential distortion. Corrected weight flow, 214.06 pounds per second; maximum flow rate; reading number 44.

Figure 5. - Continued.

blade elements are less than the corresponding values with uniform flow, indicating that with radial distortion the blade tip element probably stalled first. With radial distortion the maximum discharge temperature recorded at the tip was 644°R , while the corresponding maximum value with uniform inlet flow was 643°R . Since this indicates the same level of blade loading in both cases, it is probable that with uniform flow the tip element also stalled first. The unloading of the blade elements away from the tip, as indicated by the lower discharge temperatures of figure 5(b), may be attributed to the higher velocities through the open (unscreened) area of the annulus at the rotor inlet and the accompanying radial redistribution of flow through the rotor. Higher through-flow velocities yield lower blade incidence angles resulting in lower energy additions. The lower overall pressure ratio observed with radial distortion (see fig. 3(a)) is due primarily to this unloading of the blade elements away from the tip. Radial surveys of static pressure at the inlet and discharge to the rotor along with the flow angle measurements at the discharge would allow a more definitive analysis of the local flow conditions.

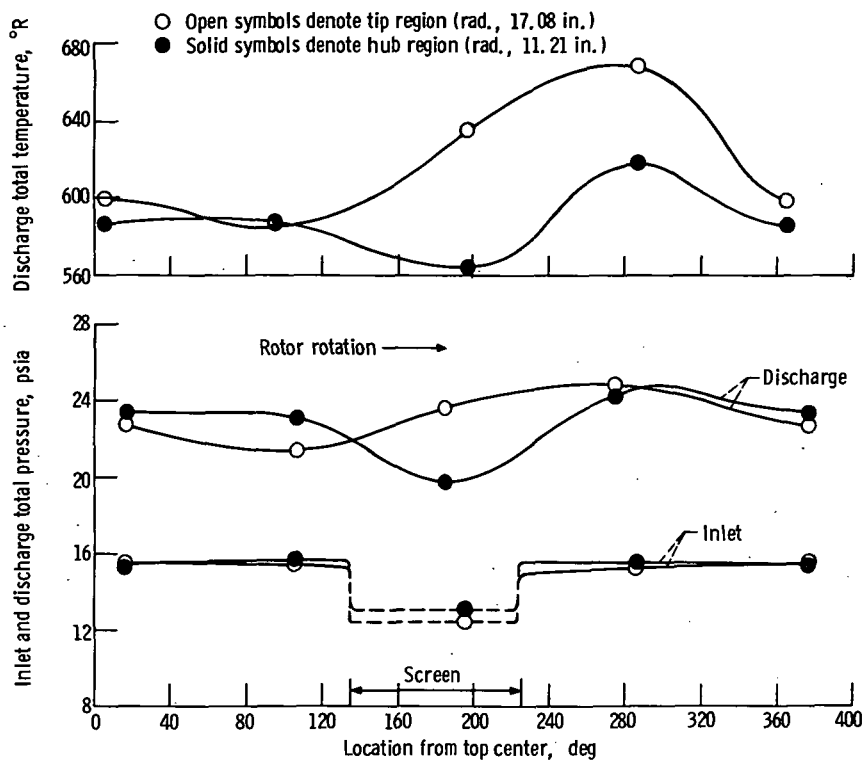
For operation at the near-stall condition with circumferential distortion (fig. 5(e)), the discharge temperature data for the blade tip region shows a maximum of 670°R and a minimum of 586°R . Similar, but less severe, trends are also noted in the hub region of the blade. This circumferential variation in temperature demonstrates the rather



(d) Circumferential distortion. Corrected weight flow, 212.02 pounds per second; intermediate flow rate; reading number 46.

Figure 5. - Continued.

large changes in loading which a given blade encounters during each revolution of the rotor. As the blade traverses the region behind the screen, a steep gradient in energy addition (increasing discharge temperature) is noted. This gradient appears greater than might be expected on the basis of changes in through-flow velocity alone. This leads to speculation that a circumferential variation in fluid flow angle exists around the inlet to the rotor. For example, a change in inlet fluid flow angle of 4° at the tip would result in about a 10° R change in discharge temperature for the design through-flow velocity. Reference 5 indicates that such an angle variation is probable for the axial spacing between the screen and the rotor used for these tests. A comparison of the circumferential distortion of figure 5(e) with the corresponding near-stall data with uniform flow shows that three of the four discharge temperatures with circumferential distortion are less than that observed with uniform inlet flow. Thus, during each revolution, the blade operates for only a relatively short period of time at the higher loading condition. This may account for the ability of the blade to operate at loadings greater than those indicated with uniform flow without the initiation of rotating stall. The unloading of the blade over the remaining portion of the annulus partially accounts for the lower overall pressure ratio indicated by the performance curves of figure 3(b). Surveys of flow angle and



(e) Circumferential distortion. Corrected weight flow, 209.94 pounds per second; minimum near-stall; reading number 43.

Figure 5. - Concluded.

static pressure at the rotor inlet and discharge plus additional total pressures and temperature measurements circumferentially would allow a more complete analysis of the very complex flow field associated with circumferential distortion. Although the circumferential distortion data are limited, observations indicate that the magnitude of distortion, the time required for a given blade to traverse the distorted flow region and flow angularity (from axial direction) at the rotor inlet are among the factors which influence rotor stall with circumferential distortion.

Similar general observations can be made for rotor 2B. However, for rotor 2B with circumferential distortion, it should be noted that maximum recorded discharge total temperatures occurred in most instances at the 95° circumferential location as opposed to the 287° location observed for rotor 1B. It, therefore, appears likely that the temperature rakes at circumferential locations of 95° and 287° were inadvertently reversed. However, a thorough check of the test logs failed to verify this reversal of the rakes, although it remains a possibility. Otherwise, the implications are that either a swirl (in the direction of rotation) of about 270° occurred between the blade leading edges and the 8.9-inch measuring station or that about a 90° swirl occurred in the opposite direction (assuming that maximum discharge temperature is directly related to

the presence of the screen). Neither of these appear probable. Radial locations, temperature readings, and all other data were unaffected by this possible rake reversal.

Comparisons of data of figure 5 are made on the basis of results obtained at the near-stall operating condition. These results represent steady-state operation as near to stall as was practical from mechanical stress considerations. However, comparisons at the exact stall condition would be more desirable. In order to obtain such a comparison, the maximum discharge temperature data (tabulated values) for the blade tip region were plotted as a function of stall margin (fig. 6) and then extrapolated to zero stall margin. Stall margin (in percent) is defined (as in ref. 4) as

$$S. M. = \left\{ \left[\frac{(P_2/P_1)_{ST}}{(P_2/P_1)_X} \frac{W_X}{W_{ST}} \right] - 1.0 \right\} (100)$$

where

$(P_2/P_1)_{ST}$, $(P_2/P_1)_X$ compressor pressure ratio at stall and point of interest, respectively

W_{ST} , W_X corrected weight flow corresponding to the respective compressor pressure ratio

Thus zero stall margin corresponds to the point of stall. The test points shown in figure 6 include both rotors, with and without distortion, for various values of percent design

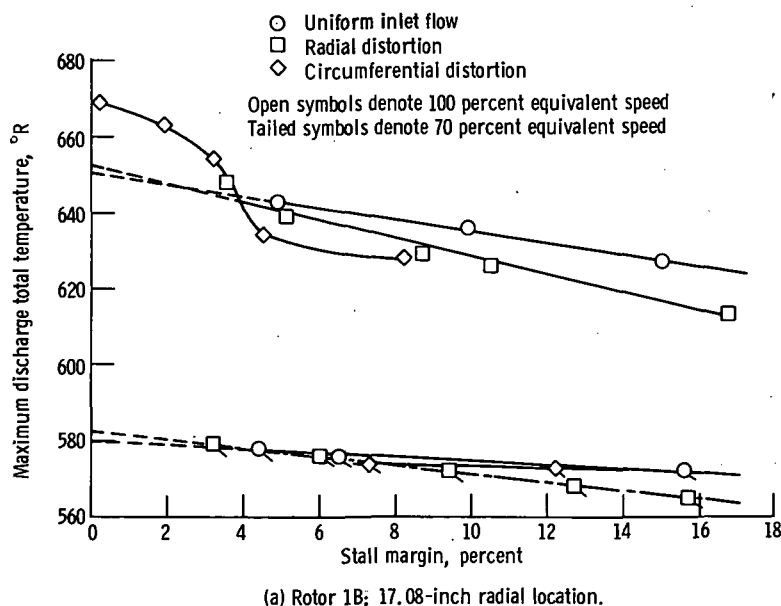
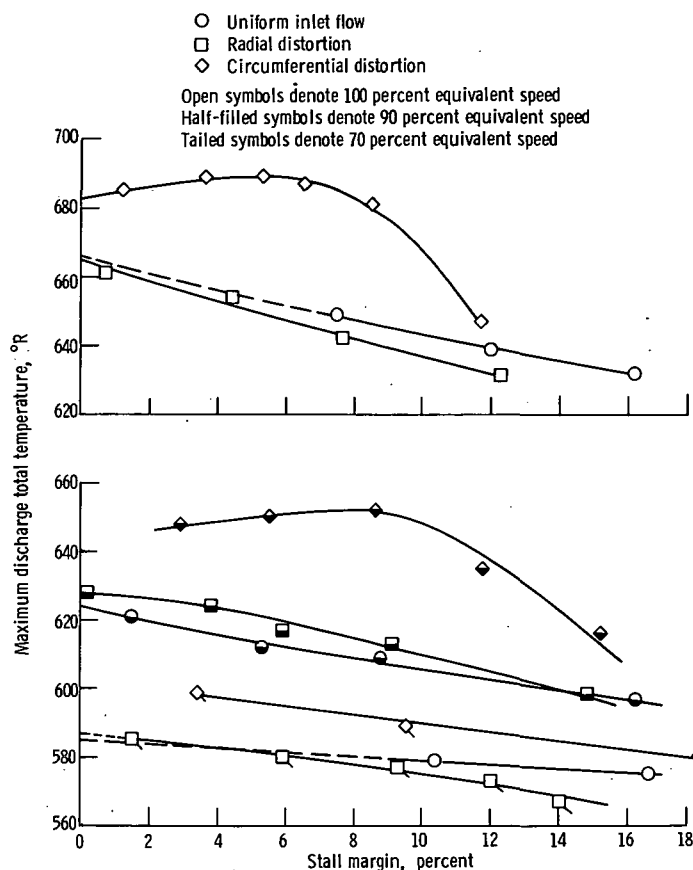


Figure 6. - Maximum equivalent discharge total temperature in blade tip region as function of rotor stall margin.



(b) Rotor 2B; 17.17-inch radial location.

Figure 6. - Concluded.

equivalent speed.

To obtain discharge temperature values for zero-percent stall margin, it was generally necessary to extrapolate the measured results by varying amounts. A study of all the data of figure 6 indicates that the data obtained with uniform inlet flow and with radial distortion bear a nearly linear relation with stall margin. Extrapolation of these results was thus a routine extension of this nearly linear variation. Conversely, the discharge temperature data obtained with circumferential distortion did not show a consistent relation with stall margin. However, for most rotor speeds, data were obtained at sufficiently low values of stall margin that only relatively small extrapolations were required. Extrapolations of circumferential distortion data from values of stall margins greater than about 3 percent were not attempted.

When compared on the basis of zero-percent stall margin, the rotor 1B data at design speed with uniform and radially distorted flow (fig. 6(a)) show the same relation with respect to blade tip loading as noted for the near-stall data of figures 5(a) and (b) which represented stall margins of 3.0 to 5.0 percent. The 70 percent equivalent speed

data for rotor 1B, as well as the rotor 2B data at the three equivalent speeds studied, all show these same trends. That is, the blade tip loading at stall with radial distortion is essentially the same as that observed with uniform flow, the level of loading depending on the particular rotor design.

With circumferential distortion, where data were sufficient to permit extrapolation to zero stall margin, the maximum discharge temperature was greater than that for operation with uniform inlet flow and with radial distortion for both rotors. Thus the conclusions arrived at from figure 5 also apply for comparisons based on zero-percent stall margin (fig. 6).

Although the data of both figures 5 and 6 lead to the same conclusions for these rotors, the curves of figure 6 illustrate the desirability of comparing distortion data at the rotor stall condition (zero-percent stall margin). At operating conditions near zero stall margin with circumferential distortion, the discharge total temperature for the blade tip elements, and thus flow conditions, varied significantly with stall margin. Observations of the effects of inlet flow distortion can vary considerably, depending on the relation between the operating point and the stall point.

REMARKS

The previous discussion illustrates the use of some limited data to provide a better understanding of the effects of inlet flow distortion on compressor operation. Both radial and circumferential variations of local flow conditions are noted. The summation of these local effects are indicative of changes in the overall rotor performance that occur with distorted inlet flow. More complete surveys of local flow conditions may provide additional or more significant concepts not apparent from the data presented or allow generalization of these data to other compressor rotor designs.

This report does the following: (1) makes available distortion data for two high tip speed rotors (1400 ft/sec), (2) points the need for more detailed local measurements, such as pertinent flow angle and static pressure surveys at the rotor inlet and discharge, (3) demonstrates that, whenever possible, flow conditions in close proximity of rotor stall should be evaluated, and (4) provides data which might aid in improving or substantiating analytical procedures.

Lewis Research Center,
National Aeronautics and Space Administration,
Cleveland, Ohio, January 23, 1969,
720-03-00-17-22.

REFERENCES

1. Seyler, D. R.; and Smith, Leroy J., Jr.: Single Stage Experimental Evaluation of High Mach Number Compressor Rotor Blading. Part 1-Design of Rotor Blading. Rep. R66FPD321, pt. 1, General Electric Co. (NASA CR-54581), Apr. 1, 1967.
2. Seyler, D. R.; and Gostelow, J. P.: Single Stage Experimental Evaluation of High Mach Number Compressor Rotor Blading. Part 2-Performance of Rotor 1B. Rep. R67FPD236, General Electric Co. (NASA CR-54582), Sept. 22, 1967.
3. Gostelow, J. P.; and Krabacher, K. W.: Single Stage Experimental Evaluation of High Mach Number Compressor Rotor Blading. Part 5-Performance of Rotor 2B. Rep. R67FPD278, General Electric Co. (NASA CR-54585), Oct. 13, 1967.
4. Gostelow, J. P.; Krabacher, K. W.; and Smith, L. H., Jr.: Performance Comparisons of High Mach Number Compressor Rotor Blading. NASA CR-1256, 1968.
5. Plourde, G. A.; and Stenning, A. H.: The Attenuation of Circumferential Inlet Distortion in Multi-stage Axial Compressors. Paper 67-415, AIAA, July 1967.

TABLE 1. - ROTOR DESIGN PARAMETERS

Design parameter	Rotor 1B	Rotor 2B
Hub-tip ratio	0.5	0.5
Blade tip speed, ft/sec	1400	1400
Rotor tip diameter, in.	36.5	36.5
Flow rate, lb/sec	215.5	215.5
Rotor tip solidity	1.3	1.3
Pressure ratio	1.6	1.76
Adiabatic efficiency	0.858	0.837
Diffusion factor (rotor blade tip)	0.35	0.45

TABLE 2. - ROTOR 1B OVERALL PERFORMANCE

Reading number	Equivalent rotor speed, percent design	Total pressure ratio	Rotor adiabatic efficiency	Equivalent weight flow, lb/sec
Uniform inlet flow (no distortion)				
52T	100.08	1.636	0.8915	219.38
54T	100.05	1.478	.8463	221.21
55T	100.05	1.558	.8745	220.68
56T	100.05	1.687	.8972	216.31
57T	100.12	1.723	.8816	211.02
64T	100.01	1.750	.8728	204.79
65T	100.16	1.297	.7712	221.81
76T	70.10	1.252	.9200	157.16
77T	69.95	1.161	.8845	174.67
78T	69.95	1.225	.9167	163.30
79T	70.03	1.274	.8912	147.50
80T	69.99	1.289	.8652	137.29
81T	69.95	1.293	.8284	126.99
84T	49.97	1.118	.9242	113.20
85T	49.94	1.084	.8770	129.90
86T	49.94	1.096	.9008	124.80
87T	49.98	1.103	.8847	120.40
88T	49.97	1.110	.8954	117.50
89T	49.95	1.130	.8849	105.10
90T	49.96	1.142	.8605	92.50
92T	69.94	1.295	.8312	124.50
93T	49.97	1.142	.8248	90.60
103T	70.06	1.204	.9180	168.78
Radial distortion				
17	50.00	1.123	0.8291	106.86
18	70.09	1.257	.8645	154.96
19	100.06	1.567	.8216	212.30
20	50.03	1.108	.8337	118.59
21	50.06	1.119	.8360	110.28
22	50.10	1.103	.8244	120.88
23	49.91	1.114	.8761	115.50
24	70.04	1.215	.8702	168.04
25	70.08	1.226	.8693	165.11
26	70.11	1.240	.8731	162.05
27	70.14	1.251	.8641	158.32
28	100.13	1.405	.7719	216.34
29	100.16	1.479	.8048	215.87
30	99.97	1.502	.8109	215.31
31	100.03	1.540	.8153	213.46
Circumferential distortion				
33	50.05	1.102	0.8587	119.13
34	50.02	1.119	.8799	110.82
35	50.03	1.125	.8350	104.71
36	50.01	1.131	.8159	99.75
37	70.02	1.277	.8348	137.60
38	70.00	1.206	.8761	163.76
39	69.95	1.204	.8918	155.94
40	70.03	1.251	.8422	149.99
41	70.01	1.264	.8428	143.73
42	100.04	1.541	.8152	211.36
43	100.08	1.558	.8146	209.94
44	100.05	1.471	.8217	214.06
45	100.02	1.512	.8284	212.80
46	100.06	1.527	.8160	212.02

TABLE 3. - ROTOR 2B OVERALL PERFORMANCE

Reading number	Equivalent rotor speed, percent design	Total pressure ratio	Rotor adiabatic efficiency	Equivalent weight flow, lb/sec
Uniform inlet flow (no distortion)				
14T	100.06	1.375	0.7654	225.50
15T	100.06	1.523	.8149	226.12
16T	100.07	1.662	.8666	226.40
17T	100.07	1.701	.8654	225.59
18T	100.05	1.759	.8811	225.62
19T	100.06	1.818	.8900	224.62
27T	90.04	1.323	.8215	215.48
28T	90.06	1.494	.9037	216.01
29T	90.08	1.524	.9045	214.42
30T	90.04	1.564	.9246	213.30
31T	90.03	1.636	.9284	209.13
32T	90.03	1.660	.9389	205.47
44T	69.99	1.211	.8620	185.80
45T	69.95	1.282	.9249	181.00
46T	70.00	1.305	.9319	176.80
47T	69.98	1.317	.9383	174.00
48T	70.00	1.339	.9371	167.80
49T	70.05	1.353	.9024	159.20
50T	70.05	1.354	.8710	151.00
52T	90.03	1.676	.9055	200.01
53T	100.06	1.864	.8821	221.05
Radial distortion				
80	70.05	1.288	0.9371	179.71
81	90.14	1.413	.8178	208.50
82	100.12	1.463	.7716	218.00
83	100.08	1.705	.8105	213.87
84	99.99	1.669	.8173	216.95
85	100.06	1.621	.8070	217.39
86	100.10	1.554	.7875	217.40
87	90.09	1.575	.8603	202.86
88	90.08	1.543	.8651	205.98
89	90.11	1.513	.8462	205.96
90	90.09	1.486	.8581	208.49
91	70.04	1.299	.9453	178.06
92	70.05	1.310	.9133	175.15
93	70.08	1.322	.9289	171.31
94	70.06	1.336	.9071	165.89
Circumferential distortion				
95	70.01	1.274	0.9007	174.11
96	89.99	1.486	.8472	206.17
97	100.07	1.596	.7942	217.82
98	100.02	1.662	.8168	212.81
99	100.06	1.634	.8008	216.53
100	100.04	1.649	.8000	214.49
101	100.02	1.661	.8256	213.63
102	100.03	1.710	.8186	211.09
103	90.05	1.588	.8626	196.71
104	90.05	1.514	.8221	203.60
105	90.05	1.544	.8322	201.63
106	90.04	1.567	.8487	198.90
107	70.01	1.347	.8008	144.63
108	70.00	1.293	.8445	170.63
109	70.01	1.322	.9232	161.94
110	70.01	1.338	.8181	151.95

TABLE 4. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; UNIFORM FLOW; 100 PERCENT EQUIVA-
LENT DESIGN SPEED; READING NUMBER 52T

Circum-ferential location, deg	Equivalent wall static pressure, psia				
	Axial distance, Z, in.				
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9
	Tip	Hub	Tip	Hub	Hub
0	12.19	12.25	19.22	15.74	17.23
72	12.19	12.25	19.25	15.94	17.07
144	12.16	12.56	19.42	15.61	17.05
216	12.13	12.28	19.45	15.87	16.71
288	12.17	12.26	19.32	15.93	-----
300	-----	-----	-----	-----	16.43
Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.08	15.59	14.14	12.68	11.21
17	24.10	24.46	23.72	23.56	22.95
107	24.41	24.62	23.86	23.74	23.07
185	24.71	24.94	24.16	23.79	23.24
275	24.50	24.71	23.84	23.69	23.07
Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.08	15.59	14.14	12.68	11.21
5	614.9	610.4	604.6	597.3	595.0
95	617.9	612.8	606.9	598.4	594.6
197	619.1	612.2	*	599.0	593.8
287	616.0	611.9	605.7	597.6	593.8

TABLE 5. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; UNIFORM FLOW; 100 PERCENT EQUIVA-
LENT DESIGN SPEED; READING NUMBER 54T

Circum-ferential location, deg	Equivalent wall static pressure, psia				
	Axial distance, Z, in.				
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9
	Tip	Hub	Tip	Hub	Hub
0	12.11	12.16	16.77	14.23	16.95 *
72	12.12	12.15	16.88	14.47	17.03
144	12.08	12.22	16.92	14.03	16.89
216	12.06	12.16	17.00	14.41	17.01
288	12.08	12.15	16.99	14.48	-----
300	-----	-----	-----	-----	16.58 *
Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.08	15.59	14.14	12.68	11.21
17	21.21	21.20	20.90	22.01	22.10
107	21.53	21.54	21.21	22.33	22.14
185	21.46	21.47	21.33	22.17	22.12
275	21.63	21.65	21.36	22.33	22.09
Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.08	15.59	14.14	12.68	11.21
5	590.2	589.4	592.8	586.5	589.0
95	592.3	591.6	595.5	588.2	589.4
197	590.4	590.3	*	587.4	590.8
287	592.2	591.2	595.2	588.4	588.8

TABLE 6. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; UNIFORM FLOW; 100 PERCENT EQUIVA-

LENT DESIGN SPEED; READING NUMBER 55T

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	12.14	12.19	18.02	15.01	18.18	16.56
72	12.13	12.17	18.14	15.23	18.21	16.42
144	12.11	12.19	18.22	14.87	18.15	16.28
216	12.08	12.19	18.32	15.19	18.19	16.18
288	12.10	12.18	18.25	15.29	-----	-----
300	-----	-----	-----	-----	17.81	*
Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	22.58	22.90	22.50	22.92	22.50	
107	22.86	23.16	22.79	23.15	22.53	
185	23.05	23.30	22.96	23.04	22.47	
275	23.04	23.26	22.83	23.15	22.53	
Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	601.9	599.7	600.3	592.2	593.3	
95	604.5	602.2	602.4	593.4	591.8	
197	604.0	601.7	*	593.5	591.0	
287	604.6	602.4	601.9	593.5	591.4	

TABLE 7. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; UNIFORM FLOW; 100 PERCENT EQUIVA-

LENT DESIGN SPEED; READING NUMBER 56T

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	12.28	12.36	20.08	16.28	20.21	17.69
72	12.27	12.35	19.96	16.38	19.94	17.40
144	12.26	12.26	20.16	16.09	20.09	17.47
216	12.22	12.39	20.17	16.31	19.83	17.08
288	12.25	12.37	20.12	16.42	-----	-----
300	-----	-----	-----	-----	19.56	*
Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	25.35	25.33	24.52	24.07	23.43	
107	25.40	25.40	24.55	24.15	23.43	
185	25.80	25.69	24.89	24.30	23.71	
275	25.51	25.48	24.60	24.14	23.43	
Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	623.8	616.2	609.8	600.8	595.9	
95	626.0	617.7	611.4	601.4	597.5	
197	627.5	617.6	*	602.1	596.1	
287	623.4	617.4	610.9	601.2	597.1	

TABLE 8. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; UNIFORM FLOW; 100 PERCENT EQUIVA-
LENT DESIGN SPEED; READING NUMBER 57T

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	12.42	12.49	20.66	16.66	20.84	17.98
72	12.39	12.48	20.50	16.73	20.49	17.64
144	12.39	12.50	20.65	16.39	20.59	17.67
216	12.34	12.52	20.62	16.58	20.26	17.26
288	12.37	12.49	20.67	16.78	-----	-----
300	-----	-----	-----	-----	20.12	*

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	26.12	25.80	25.16	24.58	23.88	
107	26.20	25.92	25.15	24.55	23.71	
185	26.46	26.19	25.40	24.64	23.84	
275	26.28	25.99	25.15	24.49	23.68	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	632.5	621.1	615.3	604.8	598.3	
95	634.4	623.4	618.0	605.6	600.5	
197	636.3	623.0	*	605.9	599.2	
287	632.7	622.5	616.7	605.5	600.5	

TABLE 9. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; UNIFORM FLOW; 100 PERCENT EQUIVA-
LENT DESIGN SPEED; READING NUMBER 64T

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	12.64	12.66	21.17	16.98	*	18.23
72	12.61	12.64	20.99	17.08	21.02	17.90
144	12.65	12.57	21.10	16.67	21.03	17.84
216	12.61	12.68	21.08	16.87	20.72	17.52
288	12.59	12.66	21.21	17.07	-----	-----
300	-----	-----	-----	-----	20.57	*

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	26.61	26.39	25.70	24.83	24.39	
107	26.65	26.47	25.68	24.93	24.09	
185	26.74	26.35	25.72	24.82	24.03	
275	26.93	26.48	25.67	24.86	24.11	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	641.8	625.3	617.3	605.8	598.8	
95	644.5	627.2	620.5	607.7	601.4	
197	643.6	628.8	*	609.0	601.3	
287	642.2	627.4	620.7	607.9	600.9	

TABLE 10. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; UNIFORM FLOW; 100 PERCENT EQUIVA-

LENT DESIGN SPEED; READING NUMBER 65T

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	12.08	12.14	13.83	12.20	13.94	*
72	12.09	12.13	13.80	12.29	14.02	13.35
144	12.06	12.14	13.91	12.14	14.06	13.32
216	12.05	12.14	14.14	12.48	14.22	13.32
288	12.06	12.13	14.04	12.51	-----	-----
300	-----	-----	-----	-----	13.72	*
Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
	17.99	17.90	17.95	19.85	21.54	
17	18.16	18.05	18.10	19.90	21.14	
107	18.26	18.21	18.20	19.99	21.69	
185	18.27	18.21	18.35	20.11	21.20	
275						
Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
	17.99	17.90	17.95	19.85	21.54	
5	561.1	562.5	568.9	571.9	584.1	
95	562.5	563.8	570.8	574.3	584.5	
197	563.7	566.7	*	574.7	585.7	
287	563.1	565.5	571.7	574.7	584.1	

TABLE 11. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; UNIFORM FLOW; 70 PERCENT EQUIVA-

LENT DESIGN SPEED; READING NUMBER 76T

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	13.58	13.58	16.06	14.76	16.10	15.36
72	13.60	13.58	16.10	14.90	16.13	15.34
144	13.56	13.09	16.09	14.67	16.06	15.20
216	13.57	13.59	16.11	14.81	16.11	15.24
288	13.58	13.59	16.08	14.80	-----	-----
300	-----	-----	-----	-----	15.99	*
Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
	18.29	18.35	18.27	18.39	18.60	
17	18.40	18.45	18.37	18.44	18.61	
107	18.34	18.41	18.32	18.42	18.58	
185	18.35	18.40	18.35	18.41	18.58	
275						
Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
	558.7	555.4	553.7	553.7	556.0	
5	560.8	557.7	556.7	555.8	556.3	
95	558.7	555.6	*	554.3	555.7	
197	558.7	555.1	554.2	554.4	555.5	
287						

TABLE 12. - TABULATED PRESSURES AND TEMPERATURES

FOR ROTOR 1B; UNIFORM FLOW; 70 PERCENT EQUIVA-

LENT DESIGN SPEED; READING NUMBER 77T

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	13.30	13.25	14.20	13.33	14.20	14.02
72	13.31	13.25	14.19	13.45	14.28	13.91
144	13.29	13.26	14.30	13.33	14.36	13.96
216	13.28	13.26	14.38	13.52	14.42	13.96
288	13.29	13.26	14.28	13.46	-----	-----
300	-----	-----	-----	-----	14.18	*
Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	16.33	16.62	16.86	17.47	17.87	
107	16.47	16.75	16.97	17.52	17.83	
185	16.55	16.80	17.05	17.55	17.97	
275	16.49	16.77	17.01	17.53	17.82	
Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	540.1	540.6	544.9	545.8	549.8	
95	540.6	541.2	546.4	547.0	550.2	
197	539.9	541.4	*	547.0	550.2	
287	540.0	540.8	545.4	546.6	549.8	

TABLE 13. - TABULATED PRESSURES AND TEMPERATURES

FOR ROTOR 1B; UNIFORM FLOW; 70 PERCENT EQUIVA-

LENT DESIGN SPEED; READING NUMBER 78T

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	13.49	13.49	15.58	14.40	15.60	15.03
72	13.50	13.49	15.57	14.51	15.63	14.94
144	13.48	13.48	15.54	14.25	15.51	14.80
216	13.47	13.48	15.58	14.41	15.59	14.87
288	13.49	13.49	15.58	14.45	-----	-----
300	-----	-----	-----	-----	15.47	*
Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	17.74	17.83	17.91	18.12	18.36	
107	17.86	17.98	17.97	18.14	18.33	
185	17.78	17.92	17.92	18.12	18.35	
275	17.84	17.94	17.95	18.12	18.31	
Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	553.0	551.7	551.1	552.0	554.3	
95	553.4	552.1	552.4	552.9	554.9	
197	552.0	551.3	*	552.2	555.3	
287	552.5	551.2	551.7	552.7	554.6	

TABLE 14. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; UNIFORM FLOW; 70 PERCENT EQUIVA-

LENT DESIGN SPEED; READING NUMBER 79T

Circum-ferential location, deg	Equivalent wall static pressure, psia						
	Axial distance, Z, in.						
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9		
	Tip	Hub	Tip	Hub	Tip	Hub	
0	13.74	13.74	16.49	15.10	16.56	15.68	
72	13.75	13.73	16.56	15.24	16.59	15.66	
144	13.74	13.75	16.58	15.06	16.59	15.62	
216	13.73	13.76	16.58	15.13	16.55	15.50	
288	13.73	13.75	16.53	15.11	-----	-----	
300	-----	-----	-----	-----	16.42	*	
Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia						
	Radial location, in.						
	17.08	15.59	14.14	12.68	11.21		
	17.08	15.59	14.14	12.68	11.21		
17	18.80	18.62	18.53	18.57	18.79		
107	18.90	18.74	18.61	18.67	18.84		
185	18.92	18.77	18.60	18.64	18.81		
275	18.83	18.69	18.53	18.62	18.81		
Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R						
	Radial location, in.						
	17.08	15.59	14.14	12.68	11.21		
	17.08	15.59	14.14	12.68	11.21		
5	565.5	559.6	557.9	556.5	557.2		
95	568.1	562.3	561.0	558.6	558.2		
197	565.8	559.9	*	557.0	557.0		
287	564.7	560.0	558.7	556.6	557.3		

TABLE 15. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; UNIFORM FLOW; 70 PERCENT EQUIVA-

LENT DESIGN SPEED; READING NUMBER 80T

Circum-ferential location, deg	Equivalent wall static pressure, psia						
	Axial distance, Z, in.						
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9		
	Tip	Hub	Tip	Hub	Tip	Hub	
0	13.87	13.86	16.90	15.34	16.91	15.91	
72	13.88	13.86	16.87	15.43	16.89	15.83	
144	13.87	13.85	16.90	15.25	16.87	15.79	
216	13.86	13.87	16.87	15.32	16.83	15.68	
288	13.86	13.87	16.85	15.31	-----	-----	
300	-----	-----	-----	-----	16.73	*	
Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia						
	Radial location, in.						
	17.08	15.59	14.14	12.68	11.21		
	17	19.15	18.93	18.69	18.77	18.94	
107	19.19	18.99	18.77	18.80	18.95		
185	19.23	19.01	18.77	18.78	18.97		
275	19.17	18.96	18.74	18.76	18.95		
Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R						
	Radial location, in.						
	17.08	15.59	14.14	12.68	11.21		
	5	570.3	563.2	561.8	558.9	558.7	
95	573.5	566.2	564.5	561.0	570.4		
197	571.2	563.7	*	559.4	558.8		
287	570.0	563.0	561.7	558.8	558.9		

TABLE 16. - TABULATED PRESSURES AND TEMPERATURES

FOR ROTOR 1B; UNIFORM FLOW; 70 PERCENT EQUIVA-

LENT DESIGN SPEED; READING NUMBER 81T

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	13.99	13.95	17.05	15.43	17.18	16.01
72	13.99	13.93	17.01	15.51	17.07	15.90
144	13.99	13.95	17.06	15.34	17.08	15.87
216	13.99	13.96	16.99	15.37	16.96	15.70
288	13.98	13.95	16.99	15.39	-----	-----
300	-----	-----	-----	-----	16.90	*
Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	19.12	19.08	18.82	18.83	19.00	
107	19.28	19.10	18.85	18.84	18.99	
185	19.29	19.12	18.87	18.84	18.98	
275	19.23	19.07	18.80	18.78	18.97	
Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	574.8	566.5	564.6	560.6	560.0	
95	577.2	568.8	566.9	562.6	561.3	
197	575.7	567.4	*	561.1	560.1	
287	574.6	566.8	564.9	560.9	560.1	

TABLE 17. - TABULATED PRESSURES AND TEMPERATURES

FOR ROTOR 1B; UNIFORM FLOW; 50 PERCENT EQUIVA-

LENT DESIGN SPEED; READING NUMBER 84T

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	14.16	14.16	15.28	14.65	15.28	14.93
72	14.16	14.14	15.29	14.71	15.32	14.92
144	14.16	13.53	15.30	14.61	15.28	14.87
216	14.16	14.16	15.30	14.67	15.30	14.88
288	14.16	14.16	15.28	14.67	-----	-----
300	-----	-----	-----	-----	15.25	*
Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	16.33	16.40	16.36	16.48	16.58	
107	16.39	16.41	16.40	16.48	16.60	
185	16.36	16.38	16.37	16.47	16.58	
275	16.35	16.40	16.38	16.46	16.58	
Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	539.1	536.7	536.1	535.6	536.6	
95	538.8	536.6	536.4	536.1	536.9	
197	538.7	536.5	*	535.4	536.3	
287	538.8	536.8	536.4	536.0	536.6	

TABLE 18. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; UNIFORM FLOW; 50 PERCENT EQUIVA-
LENT DESIGN SPEED; READING NUMBER 85T

Circum-ferential location, deg	Equivalent wall static pressure, psia						
	Axial distance, Z, in.						
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9		
	Tip	Hub	Tip	Hub	Tip	Hub	Hub
0	13.97	13.95	14.47	13.97	14.44	14.31	
72	13.98	13.94	14.47	14.05	14.50	14.29	
144	13.98	13.96	14.52	13.99	14.54	14.33	
216	13.98	13.96	14.55	14.07	14.57	14.31	
288	13.98	13.95	14.51	14.04	-----	-----	
300	-----	-----	-----	-----	14.45	*	
Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia						
	Radial location, in.						
	17.08	15.59	14.14	12.68	11.21		
	17.08	15.59	14.14	12.68	11.21		
17	15.60	15.72	15.84	16.08	16.34		
107	15.66	15.80	15.89	16.15	16.32		
185	15.70	15.82	15.92	16.14	16.38		
275	15.65	15.78	15.88	16.14	16.30		
Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R						
	Radial location, in.						
	17.08	15.59	14.14	12.68	11.21		
	17.08	15.59	14.14	12.68	11.21		
5	532.1	532.3	532.7	533.1	534.3		
95	531.9	531.5	531.9	533.3	534.8		
197	531.7	532.1	*	533.1	534.5		
287	530.7	531.0	531.9	533.3	534.6		

TABLE 19. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; UNIFORM FLOW; 50 PERCENT EQUIVA-
LENT DESIGN SPEED; READING NUMBER 86T

Circum-ferential location, deg	Equivalent wall static pressure, psia						
	Axial distance, Z, in.						
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9		
	Tip	Hub	Tip	Hub	Tip	Hub	Hub
0	14.04	14.02	14.77	14.24	14.77	14.77	14.57
72	14.04	14.02	14.78	14.30	14.80	14.80	14.53
144	14.04	13.99	14.75	14.20	14.79	14.79	14.51
216	14.03	14.02	14.79	14.26	14.80	14.80	14.51
288	14.04	14.02	14.77	14.27	-----	-----	-----
300	-----	-----	-----	-----	14.74	*	
Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia						
	Radial location, in.						
	17.08	15.59	14.14	12.68	11.21		
	17.08	15.59	14.14	12.68	11.21		
17	15.87	15.94	16.04	16.26	16.43		
107	15.91	16.01	16.08	16.28	16.41		
185	15.91	16.00	16.08	16.24	16.44		
275	15.88	15.99	16.06	16.27	16.39		
Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R						
	Radial location, in.						
	17.08	15.59	14.14	12.68	11.21		
	17.08	15.59	14.14	12.68	11.21		
5	534.0	533.6	533.6	533.5	534.8		
95	534.9	533.9	533.7	534.4	535.2		
197	534.3	533.9	*	533.8	534.8		
287	533.0	532.9	533.4	534.2	535.0		

TABLE 20. - TABULATED PRESSURES AND TEMPERATURES

FOR ROTOR 1B; UNIFORM FLOW; 50 PERCENT EQUIVA-

LENT DESIGN SPEED; READING NUMBER 87T

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	14.07	14.06	14.97	14.40	14.96	14.71
72	14.07	14.05	14.97	14.45	14.99	14.67
144	14.07	14.07	14.96	14.35	14.95	14.63
216	14.06	14.05	14.97	14.41	14.98	14.64
288	14.07	14.05	14.97	14.42	-----	-----
300	-----	-----	-----	-----	14.93	*
Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	16.04	16.09	16.16	16.27	16.44	
107	16.07	16.15	16.18	16.32	16.45	
185	16.00	16.13	16.17	16.32	16.46	
275	16.05	16.12	16.18	16.32	16.43	
Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	536.0	535.0	534.5	534.7	535.7	
95	536.7	535.5	535.5	535.6	536.3	
197	535.6	534.7	*	534.5	535.8	
287	535.1	534.6	534.7	535.2	535.9	

TABLE 21. - TABULATED PRESSURES AND TEMPERATURES

FOR ROTOR 1B; UNIFORM FLOW; 50 PERCENT EQUIVA-

LENT DESIGN SPEED; READING NUMBER 88T

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	14.12	14.11	15.12	14.53	15.12	14.82
72	14.12	14.11	15.13	14.59	15.15	14.79
144	14.12	14.10	15.11	14.47	15.10	14.73
216	14.11	14.11	15.13	14.54	15.13	14.77
288	14.11	14.11	15.12	14.55	-----	-----
300	-----	-----	-----	-----	15.08	*
Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	16.19	16.24	16.27	16.37	16.54	
107	16.21	16.27	16.30	16.42	16.53	
185	16.19	16.25	16.28	16.36	16.54	
275	16.20	16.25	16.28	16.39	16.52	
Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	537.4	536.1	535.3	535.1	535.9	
95	538.4	536.8	536.7	536.4	536.9	
197	537.2	536.0	*	535.2	536.2	
287	536.9	535.9	535.6	535.7	536.3	

TABLE 22. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; UNIFORM FLOW; 50 PERCENT EQUIVA-

LENT DESIGN SPEED; READING NUMBER 89T

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	14.25	14.24	15.57	14.87	15.58	15.14
72	14.25	14.24	15.58	14.93	15.58	15.13
144	14.25	14.24	15.57	14.83	15.56	15.09
216	14.25	14.25	15.57	14.88	15.57	15.08
288	14.25	14.24	15.56	14.86	-----	-----
300	-----	-----	-----	-----	15.51	*

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	16.54	16.59	16.54	16.6	16.73	
107	16.64	16.62	16.56	16.61	16.73	
185	16.64	16.56	16.56	16.60	16.71	
275	16.63	16.60	16.54	16.59	16.70	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	542.6	539.4	538.2	537.2	537.5	
95	544.0	540.3	539.7	538.5	538.3	
197	543.4	539.9	*	537.3	537.6	
287	542.5	539.3	538.9	537.9	537.9	

TABLE 23. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; UNIFORM FLOW; 50 PERCENT EQUIVA-

LENT DESIGN SPEED; READING NUMBER 90T

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	14.37	14.32	15.84	15.05	15.91	15.32
72	14.36	14.33	15.83	15.09	15.86	15.30
144	14.37	14.29	15.84	15.01	15.86	15.27
216	14.37	14.33	15.82	15.02	15.81	15.20
288	14.35	14.33	15.81	15.03	-----	-----
300	-----	-----	-----	-----	15.78	15.21

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	16.79	16.83	16.68	16.67	16.84	
107	16.87	16.85	16.72	16.72	16.84	
185	16.89	16.86	16.73	16.71	16.82	
275	16.86	16.83	16.70	16.70	16.82	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	547.8	542.6	541.1	539.0	538.6	
95	547.7	542.5	541.5	539.4	539.0	
197	548.3	543.0	*	539.0	538.7	
287	547.7	542.6	541.4	539.3	538.8	

TABLE 24. - TABULATED PRESSURES AND TEMPERATURES

FOR ROTOR 1B; UNIFORM FLOW; 70 PERCENT EQUIVA-

LENT DESIGN SPEED; READING NUMBER 92T

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	14.03	13.96	17.02	15.45	17.27	16.02
72	14.02	13.95	17.05	15.52	17.12	15.91
144	14.03	13.65	17.09	15.35	17.13	15.88
216	14.01	13.96	17.03	15.38	17.00	15.72
288	14.02	13.95	17.05	15.41	-----	-----
300	-----	-----	-----	-----	16.96	*

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	19.21	19.13	18.84	18.84	18.84	19.03
107	19.28	19.17	18.87	18.83	18.83	19.02
185	19.29	19.17	18.89	18.84	18.84	18.99
275	19.26	19.14	18.83	18.79	18.79	18.99

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	576.3	567.7	564.6	560.5	559.3	
95	577.4	568.5	565.8	561.4	559.9	
197	577.8	568.9	*	561.1	559.7	
287	576.0	567.4	565.0	560.6	559.4	

TABLE 25. - TABULATED PRESSURES AND TEMPERATURES

FOR ROTOR 1B; UNIFORM FLOW; 50 PERCENT EQUIVA-

LENT DESIGN SPEED; READING NUMBER 93T

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	14.40	14.35	15.86	15.04	15.94	15.31
72	14.40	14.34	15.84	15.08	15.88	15.27
144	14.40	14.36	15.82	14.99	15.87	15.25
216	14.40	14.35	15.82	15.01	15.82	15.18
288	14.40	14.35	15.82	15.02	-----	-----
300	-----	-----	-----	-----	15.79	15.18

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	16.87	16.83	16.69	16.68	16.79	
107	16.90	16.85	16.71	16.70	16.80	
185	16.90	16.84	16.71	16.68	16.78	
275	16.88	16.82	16.69	16.67	16.79	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	548.9	543.2	541.6	539.5	539.1	
95	550.5	544.7	543.1	540.6	539.7	
197	549.8	543.9	*	539.6	539.1	
287	549.0	543.2	541.8	539.7	539.2	

TABLE 26. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; UNIFORM FLOW; 70 PERCENT EQUIVA-

LENT DESIGN SPEED; READING NUMBER 103T

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	13.40	13.38	15.13	14.04	15.14	14.71
72	13.41	13.37	15.12	14.14	15.18	14.60
144	13.39	13.05	15.11	13.92	15.11	14.52
216	13.38	13.37	15.14	14.06	15.16	14.53
288	13.39	13.38	15.14	14.10	-----	-----
300	-----	-----	-----	-----	15.04	*

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	17.34	17.52	17.63	17.90	18.19	
107	17.42	17.59	17.65	17.93	18.12	
185	17.37	17.56	17.64	17.93	18.21	
275	17.38	17.57	17.64	17.93	18.10	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	549.4	548.4	548.7	549.8	552.5	
95	549.2	548.4	549.7	550.8	552.9	
197	548.5	547.8	*	549.7	552.8	
287	548.6	547.9	548.8	550.2	552.3	

TABLE 27. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; RADIAL DISTORTION; 50 PERCENT
EQUIVALENT DESIGN SPEED; READING NUMBER 17

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	14.06	14.22	15.41	14.63	15.47	14.98
72	14.04	14.20	15.41	14.70	15.43	14.97
144	14.05	14.22	15.41	14.61	15.44	14.95
216	14.05	14.21	15.44	14.65	15.40	14.89
288	14.04	*	15.44	14.68	-----	-----
300	-----	-----	-----	-----	15.34	14.86

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
16	14.36	14.39	15.01	14.97	14.88	
106	14.40	14.35	14.92	14.92	*	
196	14.37	14.39	14.91	15.00	14.86	
286	14.39	14.38	14.87	15.00	14.87	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	16.41	16.37	16.45	16.53	16.66	
107	16.45	16.40	16.47	16.56	16.64	
185	16.46	16.44	16.49	16.56	16.66	
275	16.47	16.43	16.48	16.56	16.64	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	547.6	539.6	535.3	535.6	536.3	
95	550.8	542.9	539.1	538.8	538.2	
197	549.4	541.2	535.5	535.9	536.9	
287	548.7	541.2	535.7	535.8	536.5	

TABLE 28. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; RADIAL DISTORTION; 70 PERCENT
EQUIVALENT DESIGN SPEED; READING NUMBER 18

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	13.31	13.69	16.18	14.61	16.29	15.39
72	13.26	13.66	16.19	14.74	16.25	15.36
144	13.28	14.02	16.21	14.57	16.24	15.30
216	13.28	13.68	16.26	14.67	16.21	15.22
288	13.28	*	16.26	14.73	-----	-----
300	-----	-----	-----	-----	16.07	15.09

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
16	13.92	13.97	15.43	15.35	15.12	
106	14.00	13.91	15.19	15.20	*	
196	13.94	13.94	15.17	15.42	15.09	
286	13.98	13.97	15.09	15.42	15.13	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	18.27	18.16	18.39	18.57	18.73	
107	18.38	18.27	18.47	18.61	18.74	
185	18.38	18.30	18.47	18.62	18.74	
275	18.43	18.30	18.47	18.58	18.73	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	575.0	559.8	550.7	551.0	552.3	
95	579.7	564.2	555.0	554.7	554.5	
197	578.5	563.5	551.7	551.9	553.7	
287	577.6	564.1	551.9	551.8	552.8	

TABLE 29. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; RADIAL DISTORTION; 100 PERCENT
EQUIVALENT DESIGN SPEED; READING NUMBER 19

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	11.49	12.67	18.52	14.77	18.97	16.85
72	11.40	12.61	18.49	15.04	18.67	16.66
144	11.44	*	18.54	14.67	18.66	16.47
216	11.36	12.61	18.71	15.02	18.48	16.27
288	11.37	*	18.82	15.20	-----	-----
300	-----	-----	-----	-----	18.32	16.09

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
16	12.94	12.90	16.36	16.35	15.77	
106	13.04	12.80	15.85	15.89	*	
196	12.84	12.77	15.79	16.49	15.74	
286	12.87	12.87	15.67	16.45	15.86	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	23.48	23.22	22.71	22.37	22.76	
107	23.69	23.35	22.90	22.70	22.74	
185	23.74	23.31	22.97	22.50	22.76	
275	23.89	23.22	22.90	22.61	22.62	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	642.0	612.7	589.6	584.4	585.0	
95	646.6	616.7	593.8	587.8	587.5	
197	648.3	617.9	592.4	584.5	586.4	
287	641.9	619.2	593.0	585.0	584.8	

TABLE 30. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; RADIAL DISTORTION; 50 PERCENT
EQUIVALENT DESIGN SPEED; READING NUMBER 20

Circum-ferential location, deg	Equivalent wall static pressure, psia						
	Axial distance, Z, in.						
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9		
	Tip	Hub	Tip	Hub	Tip	Hub	
0	13.87	14.11	15.00	14.31	15.00	14.73	
72	13.86	14.10	15.03	14.40	15.04	14.72	
144	13.87	*	15.05	14.31	15.03	14.71	
216	13.88	14.12	15.08	14.41	15.07	14.71	
288	13.87	*	15.04	14.36	-----	-----	
300	-----	-----	-----	-----	14.95	14.58	
Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia						
	Radial location, in.						
	17.44	15.55	13.65	11.68	9.44		
	14.26	14.31	15.10	15.03	14.93		
16	14.26	14.31	15.10	15.03	14.93		
106	14.32	14.27	14.96	14.98	*		
196	14.29	14.28	14.96	15.08	14.91		
286	14.31	14.30	14.92	15.09	14.93		
Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia						
	Radial location, in.						
	17.08	15.59	14.14	12.68	11.21		
	16.04	16.05	16.23	16.42	16.60		
17	16.04	16.05	16.23	16.42	16.60		
107	16.08	16.09	16.27	16.43	16.59		
185	16.09	16.11	16.28	16.46	16.63		
275	16.08	16.10	16.24	16.45	16.58		
Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R						
	Radial location, in.						
	17.08	15.59	14.14	12.68	11.21		
	16.04	16.05	16.23	16.42	16.60		
5	542.8	537.2	533.5	534.5	535.5		
95	545.2	539.1	536.2	537.1	536.8		
197	543.3	537.3	532.9	533.8	535.4		
287	543.8	538.6	533.6	534.2	535.4		

TABLE 31. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; RADIAL DISTORTION; 50 PERCENT
EQUIVALENT DESIGN SPEED; READING NUMBER 21

Circum-ferential location, deg	Equivalent wall static pressure, psia						
	Axial distance, Z, in.						
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9		
	Tip	Hub	Tip	Hub	Tip	Hub	
0	14.00	14.19	15.30	14.56	15.35	14.93	
72	13.99	14.17	15.33	14.64	15.34	14.92	
144	14.00	13.97	15.32	14.53	15.34	14.88	
216	13.99	14.18	15.31	14.58	15.30	14.85	
288	13.98	*	15.31	14.59	-----	-----	
300	-----	-----	-----	-----	15.25	14.80	
Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia						
	Radial location, in.						
	17.44	15.55	13.65	11.68	9.44		
	14.32	14.38	15.03	14.98	14.89		
16	14.32	14.38	15.03	14.98	14.89		
106	14.37	14.33	14.92	14.94	*		
196	14.35	14.34	14.93	15.03	14.88		
286	14.36	14.36	14.88	15.04	14.89		
Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia						
	Radial location, in.						
	17.08	15.59	14.14	12.68	11.21		
	16.30	16.29	16.40	16.53	16.66		
17	16.30	16.29	16.40	16.53	16.66		
107	16.35	16.35	16.42	16.54	16.63		
185	16.34	16.34	16.42	16.51	16.62		
275	16.35	16.34	16.42	16.52	16.63		
Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R						
	Radial location, in.						
	17.08	15.59	14.14	12.68	11.21		
	546.0	539.0	534.9	535.4	536.3		
5	546.0	539.0	534.9	535.4	536.3		
95	548.3	540.9	537.4	537.6	537.6		
197	547.7	540.1	534.9	535.3	536.5		
287	547.1	540.6	535.5	535.6	536.5		

TABLE 32. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; RADIAL DISTORTION; 50 PERCENT
EQUIVALENT DESIGN SPEED; READING NUMBER 22

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	13.93	14.14	15.15	14.43	15.16	14.82
72	13.92	14.13	15.17	14.49	15.17	14.81
144	13.92	14.11	15.18	14.43	15.18	14.80
216	13.92	14.14	15.19	14.49	15.16	14.77
288	13.92	*	15.20	14.48	-----	-----
300	-----	-----	-----	-----	15.11	14.71
Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
16	14.30	14.35	15.07	15.01	14.92	
106	14.34	14.29	14.94	14.96	*	
196	14.32	14.31	14.95	15.06	14.89	
286	14.33	14.33	14.90	15.07	14.91	
Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	16.17	16.17	16.32	16.47	16.64	
107	16.21	16.23	16.34	16.50	16.61	
185	16.24	16.24	16.34	16.50	16.64	
275	16.22	16.22	16.33	16.49	16.60	
Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	543.6	537.7	533.6	534.3	535.1	
95	545.1	538.3	535.4	535.8	535.7	
197	544.2	537.6	533.1	533.2	534.5	
287	544.5	539.2	534.6	534.6	535.7	

TABLE 33. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; RADIAL DISTORTION; 50 PERCENT
EQUIVALENT DESIGN SPEED; READING NUMBER 23

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	13.83	14.08	14.87	14.19	14.86	14.62
72	13.82	14.07	14.91	14.28	14.91	14.63
144	13.83	14.09	14.94	14.23	14.94	14.64
216	13.83	14.09	14.97	14.31	14.97	14.64
288	13.83	*	14.91	14.24	-----	-----
300	-----	-----	-----	-----	14.82	14.48
Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
16	14.24	14.29	15.11	15.04	14.94	
106	14.30	14.24	14.97	15.00	*	
196	14.27	14.26	14.97	15.10	14.92	
286	14.29	14.28	14.93	15.11	14.94	
Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	15.90	15.92	16.14	16.36	16.57	
107	15.97	15.99	16.17	16.38	16.57	
185	15.98	16.01	16.20	16.41	16.59	
275	15.96	15.98	16.16	16.38	16.54	
Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	540.6	535.8	532.4	533.5	534.9	
95	543.6	538.5	535.6	536.2	536.4	
197	542.6	537.4	533.0	534.1	535.4	
287	542.1	537.5	532.8	533.8	535.1	

TABLE 34. - TABULATED PRESSURES AND TEMPERATURES

FOR ROTOR 1B; RADIAL DISTORTION; 70 PERCENT

EQUIVALENT DESIGN SPEED; READING NUMBER 24

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	12.96	13.50	15.21	13.81	15.20	14.77
72	12.92	13.47	15.27	14.00	15.31	14.75
144	12.94	13.73	15.38	13.91	15.36	14.79
216	12.94	13.50	15.47	14.07	15.44	14.74
288	12.96	*	15.35	13.96	-----	-----
300	-----	-----	-----	-----	15.10	14.43
Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
	16	13.73	13.76	15.62	15.51	15.24
106	13.82	13.70	15.29	15.34	*	
196	13.75	13.73	15.27	15.61	15.21	
286	13.80	13.79	15.18	15.61	15.26	
Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
	17	17.27	17.27	17.72	18.15	18.49
107	17.41	17.45	17.79	18.23	18.49	
185	17.51	17.56	17.88	18.31	18.53	
275	17.43	17.47	17.78	18.23	18.44	
Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
	5	562.8	552.9	545.1	546.7	549.1
95	565.5	555.2	548.7	549.8	551.2	
197	565.0	555.6	546.6	548.1	550.1	
287	565.5	556.5	546.7	547.5	549.7	

TABLE 35. - TABULATED PRESSURES AND TEMPERATURES

FOR ROTOR 1B; RADIAL DISTORTION; 70 PERCENT

EQUIVALENT DESIGN SPEED; READING NUMBER 25

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	13.04	13.55	15.46	14.04	15.49	14.96
72	13.01	13.52	15.49	14.17	15.53	14.90
144	13.00	13.60	15.55	14.06	15.53	14.89
216	13.00	13.54	15.63	14.24	15.60	14.88
288	13.01	*	15.58	14.17	-----	-----
300	-----	-----	-----	-----	15.35	14.64
Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
	16	13.78	13.82	15.58	15.47	15.22
106	13.86	13.74	15.28	15.31	*	
196	13.78	13.76	15.25	15.57	15.18	
286	13.82	13.82	15.15	15.58	15.24	
Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
	17	17.53	17.51	17.93	18.28	18.56
107	17.63	17.69	17.96	18.31	18.56	
185	17.70	17.69	17.96	18.37	18.58	
275	17.68	17.68	17.96	18.36	18.51	
Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
	5	565.8	555.0	546.7	548.1	550.0
95	568.1	556.7	549.7	550.7	551.8	
197	568.0	557.1	547.6	548.7	550.4	
287	568.5	558.9	548.8	549.4	550.7	

TABLE 36. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; RADIAL DISTORTION; 70 PERCENT
EQUIVALENT DESIGN SPEED; READING NUMBER 26

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	13.11	13.60	15.76	14.28	15.82	15.15
72	13.08	13.57	15.78	14.42	15.83	15.10
144	13.09	13.57	15.84	14.30	15.85	15.10
216	13.09	13.59	15.87	14.39	15.81	14.99
288	13.09	*	15.86	14.41	-----	-----
300	-----	-----	-----	-----	15.66	14.86

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
16	13.81	13.86	15.54	15.43	15.20	
106	13.90	13.80	15.25	15.28	*	
196	13.82	13.81	15.24	15.52	15.16	
286	13.86	13.87	15.13	15.53	15.20	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	17.86	17.78	18.13	18.43	18.69	
107	17.98	18.03	18.18	18.44	18.62	
185	18.05	17.96	18.19	18.47	18.65	
275	18.03	17.92	18.19	18.43	18.58	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	569.4	557.0	548.1	549.5	550.8	
95	572.9	560.0	551.9	553.0	552.9	
197	572.1	559.3	549.0	549.5	551.8	
287	571.5	560.0	549.9	550.0	551.3	

TABLE 37. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; RADIAL DISTORTION; 70 PERCENT
EQUIVALENT DESIGN SPEED; READING NUMBER 27

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	13.21	13.64	16.00	14.49	16.12	15.30
72	13.18	13.62	16.04	14.63	16.10	15.27
144	13.18	13.61	16.06	14.45	16.06	15.20
216	13.18	13.64	16.06	14.54	16.00	15.13
288	13.18	*	16.09	14.60	-----	-----
300	-----	-----	-----	-----	15.90	15.01

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
16	13.86	13.92	15.50	15.39	15.17	
106	13.95	13.84	15.21	15.25	*	
196	13.88	13.86	15.22	15.48	15.13	
286	13.90	13.91	15.11	15.48	15.17	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	18.13	18.02	18.30	18.52	18.75	
107	18.25	18.19	18.37	18.59	18.70	
185	18.23	18.16	18.36	18.55	18.68	
275	18.28	18.18	18.38	18.53	18.67	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	573.5	559.3	550.4	551.0	552.1	
95	575.9	561.2	552.4	552.5	552.9	
197	575.9	562.4	551.2	551.2	553.1	
287	575.2	563.7	552.9	552.8	553.5	

TABLE 39. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; RADIAL DISTORTION; 100 PERCENT
EQUIVALENT DESIGN SPEED; READING NUMBER 29

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	11.28	12.66	17.18	13.53	17.43	16.06
72	11.20	12.60	17.21	13.85	17.33	15.86
144	11.22	12.90	17.30	13.54	17.30	15.74
216	11.14	12.59	17.48	13.88	17.38	15.78
288	11.19	*	17.48	13.97	-----	-----
300	-----	-----	-----	-----	17.02	*

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44		15.55		11.68	
	17.44		15.55		11.68	
16	12.87		12.80		16.49	
106	12.93		12.67		15.94	
196	12.74		12.63		15.73	
286	12.77		12.78		15.68	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08		15.59		14.14	
	17.08		15.59		14.14	
17	21.90		21.79		21.31	
107	22.04		22.12		21.37	
185	22.16		22.05		21.52	
275	22.27		22.14		21.57	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08		15.59		14.14	
	17.08		15.59		14.14	
5	622.5		601.9		579.3	
95	624.0		603.6		583.6	
197	626.1		604.4		581.2	
287	624.8		607.4		582.1	

TABLE 38. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; RADIAL DISTORTION; 100 PERCENT
EQUIVALENT DESIGN SPEED; READING NUMBER 28

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	11.23	12.66	15.87	12.42	16.02	15.22
72	11.16	12.60	15.97	12.83	16.12	15.14
144	11.16	*	16.24	12.73	16.25	15.10
216	11.09	12.59	16.44	13.00	16.36	15.15
288	11.14	*	16.37	12.99	-----	-----
300	-----	-----	-----	-----	15.79	*

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44		15.55		11.68	
	17.44		15.55		11.68	
16	12.86		12.78		16.48	
106	12.94		12.65		15.97	
196	12.72		12.60		15.75	
286	12.76		12.75		15.68	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08		15.59		14.14	
	17.08		15.59		14.14	
17	20.23		20.28		20.08	
107	20.51		20.71		20.16	
185	20.73		20.75		20.45	
275	20.92		20.87		20.51	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08		15.59		14.14	
	17.08		15.59		14.14	
5	606.6		591.7		572.2	
95	609.5		594.6		576.7	
197	610.1		597.5		575.2	
287	613.0		600.0		576.4	

TABLE 41. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; RADIAL DISTORTION; 100 PERCENT
EQUIVALENT DESIGN SPEED; READING NUMBER 31

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	11.41	12.68	18.10	14.37	18.46	16.58
72	11.32	12.61	18.10	14.68	18.27	16.47
144	11.35	12.68	18.17	14.36	18.25	16.30
216	11.29	12.62	18.38	14.76	18.18	16.17
288	11.32	*	18.48	14.90	-----	-----
300	-----	-----	-----	-----	17.98	15.93

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
16	12.90	12.87	16.46	16.39	15.80	
106	12.96	12.73	15.86	15.94	*	
196	12.79	12.67	15.80	16.53	15.79	
286	12.83	12.85	15.63	16.50	15.91	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	23.07	22.83	22.20	21.90	22.48	
107	23.20	22.86	22.40	22.24	22.36	
185	23.34	22.92	22.55	22.02	22.53	
275	23.52	22.90	22.49	22.24	22.39	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	635.4	609.5	586.6	582.1	583.2	
95	639.5	612.5	590.4	584.9	584.5	
197	640.3	614.6	589.6	581.9	584.7	
287	637.7	616.3	590.9	582.8	583.2	

TABLE 40. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; RADIAL DISTORTION; 100 PERCENT
EQUIVALENT DESIGN SPEED; READING NUMBER 30

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	11.32	12.66	17.53	13.87	17.81	16.27
72	11.23	12.61	17.57	14.19	17.70	16.11
144	11.26	12.77	17.62	13.86	17.67	15.94
216	11.18	12.60	17.79	14.21	17.67	15.95
288	11.23	*	17.86	14.32	-----	-----
300	-----	-----	-----	-----	17.36	15.56

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
16	12.88	12.80	16.46	16.39	15.83	
106	12.94	12.69	15.93	15.96	*	
196	12.75	12.65	15.75	16.58	15.81	
286	12.79	12.80	15.69	16.56	15.96	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	22.31	22.16	21.66	21.35	22.18	
107	22.48	22.37	21.80	21.64	22.02	
185	22.50	22.34	21.92	21.39	22.16	
275	22.80	22.52	21.94	21.60	22.04	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	626.6	604.8	582.2	579.2	582.1	
95	628.6	606.2	585.1	581.4	583.4	
197	630.9	607.7	584.0	579.1	582.7	
287	628.6	610.6	585.5	580.2	582.1	

TABLE 42. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; CIRCUMFERENTIAL DISTORTION; 50 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 33

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	14.14	14.12	14.78	14.25	14.76	14.57
72	14.12	14.10	14.82	14.36	14.85	14.61
144	13.77	13.99	14.90	14.25	15.07	14.77
216	13.77	13.82	15.27	14.66	15.15	14.70
288	14.15	*	14.88	14.25	-----	-----
300	-----	-----	-----	-----	14.74	14.39

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
	17.44	15.55	13.65	11.68	9.44	
16	14.93	14.74	14.79	14.95	14.84	
106	14.86	14.76	14.76	14.83	14.91	
196	14.16	14.14	14.19	14.24	14.32	
286	14.84	14.88	14.97	14.95	14.85	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
	17.08	15.59	14.14	12.68	11.21	
17	15.97	16.04	16.13	16.33	16.57	
107	15.97	16.07	16.20	16.41	16.61	
185	16.17	16.15	16.09	16.14	16.24	
275	16.01	16.11	16.15	16.35	16.62	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
	17.08	15.59	14.14	12.68	11.21	
5	532.2	531.9	532.4	533.8	535.3	
95	534.3	535.0	536.2	537.0	537.1	
197	542.3	540.2	539.0	538.5	536.6	
287	534.5	533.8	534.1	534.8	537.7	

TABLE 43. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; CIRCUMFERENTIAL DISTORTION; 50 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 34

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	14.22	14.22	15.24	14.62	15.23	14.89
72	14.20	14.20	15.23	14.68	15.25	14.88
144	13.88	13.93	15.18	14.46	15.28	14.91
216	13.91	13.93	15.59	14.92	15.49	15.02
288	14.24	*	15.31	14.62	-----	-----
300	-----	-----	-----	-----	15.19	14.74

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
	17.44	15.55	13.65	11.68	9.44	
16	14.90	14.74	14.77	14.91	14.82	
106	14.84	14.75	14.77	14.82	14.86	
196	14.25	14.22	14.27	14.30	14.37	
286	14.82	14.86	14.93	14.91	14.83	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
	17.08	15.59	14.14	12.68	11.21	
17	16.37	16.38	16.40	16.52	16.66	
107	16.30	16.36	16.42	16.56	16.66	
185	16.41	16.36	16.32	16.32	16.33	
275	16.45	16.43	16.39	16.54	16.78	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
	17.08	15.59	14.14	12.68	11.21	
5	535.8	534.5	534.4	535.0	536.0	
95	537.8	537.5	538.1	537.8	537.4	
197	543.7	541.2	539.2	538.2	535.7	
287	540.9	537.9	538.8	537.5	539.9	

TABLE 44. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; CIRCUMFERENTIAL DISTORTION; 50 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 35

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	14.27	14.27	15.41	14.74	15.39	15.00
72	14.25	14.24	15.39	14.80	15.39	14.98
144	13.94	13.97	15.34	14.57	15.41	14.99
216	14.00	14.01	15.74	15.03	15.66	15.15
288	14.30	*	15.50	14.75	-----	-----
300	-----	-----	-----	-----	15.38	14.86

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
16	14.88	14.74	14.75	14.89	14.81	
106	14.83	14.74	14.76	14.81	14.84	
196	14.31	14.28	14.31	14.33	14.40	
286	14.80	14.84	14.90	14.88	14.81	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	16.48	16.50	16.49	16.58	16.69	
107	16.42	16.50	16.49	16.60	16.69	
185	16.54	16.51	16.45	16.39	16.35	
275	16.61	16.58	16.48	16.55	16.83	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	539.0	536.7	536.3	536.5	536.7	
95	540.8	539.3	539.6	538.8	538.1	
197	545.2	542.3	540.1	538.0	535.5	
287	549.0	541.2	542.3	540.3	541.3	

TABLE 45. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; CIRCUMFERENTIAL DISTORTION; 50 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 36

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	14.32	14.32	15.61	14.89	15.61	15.19
72	14.29	14.29	15.51	14.87	15.51	15.03
144	14.00	14.01	15.46	14.65	15.51	15.05
216	14.08	14.05	15.83	15.09	15.76	15.24
288	14.36	*	15.68	14.90	-----	-----
300	-----	-----	-----	-----	15.59	15.02

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
16	14.87	14.74	14.74	14.87	14.82	
106	14.82	14.74	14.77	14.81	14.81	
196	14.35	14.32	14.34	14.36	14.43	
286	14.79	14.81	14.87	14.86	14.80	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	16.66	16.64	16.58	16.64	16.78	
107	16.58	16.57	16.55	16.62	16.72	
185	16.62	16.59	16.54	16.44	16.40	
275	16.80	16.71	16.55	16.59	16.88	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	542.3	539.0	538.6	537.8	537.8	
95	542.8	540.4	540.1	539.5	538.6	
197	545.9	543.0	540.6	537.6	535.2	
287	555.2	544.6	544.0	541.9	541.9	

TABLE 46. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; CIRCUMFERENTIAL DISTORTION; 70 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 37

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	14.04	14.02	16.80	15.25	16.86	15.70
72	13.92	13.91	16.48	15.11	16.48	15.41
144	13.30	13.57	16.26	14.58	16.43	15.45
216	13.48	13.43	17.11	15.61	17.02	*
288	14.11	*	16.92	15.42	-----	-----
300	-----	-----	-----	-----	16.75	15.50

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
16	15.06	14.82	14.78	15.02	14.98	
106	14.96	14.79	14.85	14.93	14.91	
196	13.98	13.92	13.96	13.98	14.11	
286	14.90	14.95	15.06	15.04	14.95	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	19.08	18.88	18.69	18.76	19.00	
107	18.76	18.63	18.52	18.67	18.84	
185	18.80	18.74	18.36	18.17	17.98	
275	19.17	18.99	18.68	18.73	19.55	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	569.1	560.9	559.4	557.2	556.4	
95	566.4	561.0	560.2	558.4	557.4	
197	574.1	567.0	562.6	555.6	547.2	
287	*	576.1	573.9	567.4	564.9	

TABLE 47. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; CIRCUMFERENTIAL DISTORTION; 70 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 38

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	13.62	13.62	14.86	13.78	14.83	14.49
72	13.60	13.54	14.94	13.97	15.01	14.55
144	12.86	13.35	15.23	13.90	*	*
216	12.86	12.95	16.18	14.91	*	*
288	13.67	*	15.15	13.99	-----	-----
300	-----	-----	-----	-----	14.72	*

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
16	15.17	14.81	14.92	15.23	15.00	
106	15.05	14.85	14.82	14.96	15.16	
196	13.57	13.54	13.61	13.70	13.89	
286	14.97	15.10	15.29	15.24	15.03	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	17.10	17.36	17.54	17.91	18.36	
107	17.19	17.46	17.66	18.11	18.49	
185	17.86	17.74	17.64	17.62	17.52	
275	17.51	17.74	17.71	18.02	18.60	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	544.1	544.0	545.2	547.0	550.0	
95	546.3	548.0	550.4	552.0	552.8	
197	*	562.1	560.3	558.4	554.7	
287	554.6	549.9	552.6	552.4	557.5	

TABLE 48. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; CIRCUMFERENTIAL DISTORTION; 70 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 39

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	13.75	13.75	15.64	14.43	15.62	15.03
72	13.69	13.67	15.62	14.54	15.67	15.00
144	13.00	13.16	15.61	14.14	15.87	15.18
216	13.06	13.12	16.63	15.26	*	*
288	13.82	*	15.92	14.62	-----	-----
300	-----	-----	-----	-----	15.54	*

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
16	15.13	14.80	14.87	15.17	14.98	
106	15.01	14.82	14.82	14.95	15.09	
196	13.71	13.66	13.73	13.81	13.97	
286	14.94	15.08	15.22	15.18	15.00	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	17.90	18.05	18.06	18.31	18.59	
107	17.88	18.05	18.08	18.43	18.59	
185	18.26	18.14	17.96	17.86	*	
275	18.36	18.20	18.01	18.30	19.12	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	550.9	549.7	548.9	550.0	552.2	
95	552.4	552.5	553.4	554.1	554.5	
197	*	563.8	560.8	558.2	554.4	
287	563.7	556.0	562.7	559.1	560.8	

TABLE 49. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; CIRCUMFERENTIAL DISTORTION; 70 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 40

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	13.83	13.84	16.01	14.69	15.97	15.23
72	13.75	13.74	15.96	14.79	15.99	15.21
144	13.10	13.19	15.86	14.33	16.07	15.30
216	13.23	13.24	16.86	15.45	*	*
288	13.92	*	16.31	14.93	-----	-----
300	-----	-----	-----	-----	15.94	14.86

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
16	15.10	14.79	14.83	15.12	14.97	
106	14.98	14.80	14.81	14.92	15.04	
196	13.83	13.77	13.82	13.87	14.03	
286	14.93	15.07	15.16	15.12	14.98	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	18.26	18.32	18.19	18.41	18.62	
107	18.17	18.28	18.27	18.51	18.63	
185	18.50	18.40	18.09	17.97	17.74	
275	18.72	18.50	18.29	18.44	19.27	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	556.0	552.7	551.9	551.9	552.7	
95	556.6	555.5	555.7	555.0	555.0	
197	572.2	565.3	561.9	557.2	552.5	
287	571.5	563.3	568.3	564.0	562.7	

TABLE 50. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; CIRCUMFERENTIAL DISTORTION; 70 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 41

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	13.93	13.93	16.38	14.96	16.36	15.41
72	13.82	13.81	16.20	14.94	16.18	15.28
144	13.18	13.36	16.05	14.44	16.24	15.37
216	13.34	13.33	17.00	15.55	*	*
288	14.01	*	16.65	15.21	-----	-----
300	-----	-----	-----	-----	16.37	15.20

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
16	15.09	14.80	14.80	15.08	14.98	
106	14.96	14.78	14.82	14.93	14.98	
196	13.90	13.84	13.88	13.91	14.07	
286	14.91	15.02	15.12	15.09	14.96	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	18.68	18.60	18.44	18.60	18.81	
107	18.46	18.48	18.36	18.54	18.72	
185	18.66	18.61	18.22	18.06	17.79	
275	18.95	18.77	18.52	18.60	19.42	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	562.4	556.9	555.7	554.4	554.8	
95	560.7	557.8	557.4	556.6	556.3	
197	573.1	566.3	562.6	556.6	549.1	
287	*	570.8	571.7	566.7	564.1	

TABLE 51. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; CIRCUMFERENTIAL DISTORTION; 100 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 42

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	12.77	12.89	17.36	14.52	17.25	15.76
72	12.65	12.70	16.60	14.07	16.68	15.40
144	11.18	12.07	16.41	13.59	17.30	16.04
216	11.10	11.28	20.05	16.59	19.33	17.08
288	12.74	*	19.25	16.24	-----	-----
300	-----	-----	-----	-----	17.92	14.94

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
16	15.53	14.95	15.34	15.85	15.38	
106	15.39	15.01	15.05	15.22	15.64	
196	12.39	12.22	12.28	12.53	13.07	
286	15.26	15.57	15.91	15.89	15.46	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	22.21	22.35	22.28	23.10	23.39	
107	21.06	21.01	20.76	22.24	23.30	
185	23.30	22.00	21.38	21.27	19.66	
275	24.74	24.85	24.30	24.48	25.16	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	592.8	591.6	593.4	586.6	586.5	
95	582.4	586.1	589.3	586.0	588.2	
197	632.7	619.1	604.9	584.3	563.0	
287	663.0	623.9	624.5	614.3	616.7	

TABLE 52. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; CIRCUMFERENTIAL DISTORTION; 100 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 43

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	12.78	12.91	17.84	14.81	17.79	16.02
72	12.63	12.69	16.87	14.16	16.87	15.44
144	11.16	11.76	16.69	13.84	17.53	16.23
216	11.23	11.36	20.28	16.74	19.56	17.19
288	12.85	*	19.55	16.42	-----	-----
300	-----	-----	-----	-----	18.19	15.17

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
16	15.50	14.96	15.30	15.81	15.36	
106	15.36	15.03	15.03	15.18	15.64	
196	12.46	12.28	12.35	12.53	13.09	
286	15.25	15.64	15.86	15.83	15.48	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	22.72	22.93	22.86	23.36	23.37	
107	21.40	21.36	21.09	22.57	23.08	
185	23.67	22.32	21.68	21.41	19.75	
275	24.88	25.04	24.37	24.53	25.22	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	598.7	595.2	595.9	588.5	586.3	
95	585.9	588.3	591.6	586.7	587.3	
197	635.5	620.8	605.7	585.2	563.7	
287	668.9	628.5	627.4	615.5	618.7	

TABLE 53. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; CIRCUMFERENTIAL DISTORTION; 100 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 44

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	12.75	12.86	15.79	13.44	15.51	14.99
72	12.67	12.72	15.26	13.14	15.45	14.62
144	11.16	11.77	15.89	13.20	16.83	15.83
216	10.78	11.09	19.36	16.06	18.53	16.43
288	12.57	*	17.95	15.41	-----	-----
300	-----	-----	-----	-----	16.04	13.14

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
16	15.57	15.02	15.42	15.90	15.40	
106	15.44	15.09	15.07	15.31	15.74	
196	12.23	12.06	12.15	12.39	12.96	
286	15.24	15.49	15.98	15.99	15.48	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	20.33	20.26	20.24	21.85	23.02	
107	19.51	19.59	19.54	21.19	23.39	
185	22.63	21.21	20.68	20.92	19.16	
275	23.52	23.77	23.27	24.00	24.84	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	575.8	577.1	580.9	580.3	584.1	
95	569.6	574.0	580.2	578.9	587.7	
197	628.3	615.6	601.7	581.8	561.4	
287	619.1	610.4	614.3	608.8	609.5	

TABLE 55. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; CIRCUMFERENTIAL DISTORTION; 100 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 46

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	12.78	12.90	17.11	14.33	16.93	15.60
72	12.66	12.70	16.38	13.93	16.48	15.27
144	11.14	11.72	16.28	13.57	17.19	15.98
216	11.03	11.24	19.94	16.51	19.18	16.96
288	12.73	*	19.08	16.15	-----	-----
300	-----	-----	-----	-----	17.70	14.77

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
16	15.52	14.98	15.28	15.86	15.38	
106	15.43	15.03	15.08	15.26	15.65	
196	12.34	12.19	12.24	12.41	12.99	
286	15.25	15.60	15.98	15.97	15.49	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	21.77	22.01	21.96	22.94	23.18	
107	20.83	20.77	20.57	22.05	23.33	
185	23.19	21.80	21.20	21.14	19.47	
275	24.48	24.68	24.11	24.36	25.09	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	589.5	589.6	591.8	585.7	586.7	
95	579.6	584.1	587.3	584.1	587.9	
197	632.5	618.6	603.5	583.5	562.1	
287	653.5	621.3	623.7	614.4	614.6	

TABLE 54. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 1B; CIRCUMFERENTIAL DISTORTION; 100 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 45

Circum-ferential location, deg	Equivalent wall static pressure, psia					
	Axial distance, Z, in.					
	Inlet, -1.1		Discharge, 3.65		Discharge, 8.9	
	Tip	Hub	Tip	Hub	Tip	Hub
0	12.77	12.88	16.72	14.04	16.47	15.41
72	12.66	12.71	16.12	13.79	16.25	15.13
144	11.16	11.73	16.13	13.44	17.05	15.92
216	10.94	11.19	19.80	16.38	19.01	16.85
288	12.67	*	18.77	15.98	-----	-----
300	-----	-----	-----	-----	17.33	14.43

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia					
	Radial location, in.					
	17.44	15.55	13.65	11.68	9.44	
16	15.53	14.99	15.36	15.87	15.39	
106	15.43	15.08	15.07	15.27	15.71	
196	12.30	12.13	12.20	12.41	13.01	
286	15.24	15.52	15.97	15.95	15.49	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
17	21.29	21.50	21.37	22.73	23.14	
107	20.47	20.50	20.33	21.79	23.44	
185	23.00	21.62	21.02	21.13	19.37	
275	24.03	24.46	23.93	24.33	25.07	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.08	15.59	14.14	12.68	11.21	
5	586.1	585.3	588.4	584.1	586.3	
95	576.4	581.7	585.7	582.8	587.8	
197	630.2	616.9	602.4	582.3	561.3	
287	633.8	617.0	619.6	611.7	612.2	

TABLE 56. - TABULATED PRESSURES AND TEMPERATURES FOR ROTOR 2B; UNIFORM FLOW; 100 PERCENT EQUIVALENT DESIGN SPEED; READING NUMBER 14T

Circumferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	11.90	12.76	13.14	9.04
72	11.90	12.86	13.08	9.09
144	11.87	12.78	13.19	9.20
216	11.86	12.77	13.66	9.72
288	11.89	12.80	13.58	9.58

Circumferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
17	17.96	18.79	18.96	22.22	23.11
107	18.13	18.94	19.01	22.04	22.78
185	18.16	19.06	19.12	22.39	23.26
275	18.44	19.35	19.28	22.53	23.21

Circumferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
5	561.8	*	578.3	592.9	603.0
95	568.7	580.9	583.3	595.6	600.7
197	566.8	578.9	581.0	594.4	605.1
287	562.6	574.5	578.4	592.1	600.9

TABLE 57. - TABULATED PRESSURES AND TEMPERATURES FOR ROTOR 2B; UNIFORM FLOW; 100 PERCENT EQUIVALENT DESIGN SPEED; READING NUMBER 15T

Circumferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	11.90	12.76	15.68	11.18
72	11.92	12.87	16.00	11.38
144	11.88	12.79	15.98	11.50
216	11.86	12.78	16.09	11.51
288	11.90	12.80	16.10	11.57

Circumferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
17	20.73	21.85	21.03	23.86	23.66
107	21.28	22.34	21.35	24.08	23.66
185	21.02	22.12	21.50	23.88	23.96
275	21.07	22.24	21.39	24.01	23.91

Circumferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
5	593.2	*	594.5	601.5	606.4
95	597.2	602.0	598.5	604.3	604.7
197	596.5	600.5	597.6	603.0	*
287	596.2	599.6	596.7	602.1	605.1

TABLE 58. - TABULATED PRESSURES AND TEMPERATURES FOR ROTOR 2B; UNIFORM FLOW; 100 PERCENT EQUIVALENT DESIGN SPEED; READING NUMBER 16T

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	11.92	12.77	17.95	13.02
72	11.91	12.86	17.92	13.18
144	11.89	12.79	18.06	13.44
216	11.88	12.78	18.19	13.56
288	11.91	12.80	18.21	13.51

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	17.17	15.82	14.50	13.20	11.86
17	23.34	24.36	23.72	25.23	24.71
107	23.48	24.46	23.60	25.42	24.82
185	23.83	24.88	24.16	25.56	24.83
275	23.54	24.71	24.07	25.45	24.81

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	17.17	15.82	14.50	13.20	11.86
5	614.6	*	611.4	610.1	610.2
95	616.9	614.8	614.6	611.7	608.8
197	618.9	615.8	615.9	611.5	594.4
287	615.5	612.5	611.9	609.3	608.3

TABLE 59. - TABULATED PRESSURES AND TEMPERATURES FOR ROTOR 2B; UNIFORM FLOW; 100 PERCENT EQUIVALENT DESIGN SPEED; READING NUMBER 17T

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	11.94	12.78	18.53	13.69
72	11.94	12.87	18.48	13.77
144	11.92	12.80	18.61	13.96
216	11.91	12.79	18.72	14.09
288	11.93	12.82	18.77	14.04

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	17.17	15.82	14.50	13.20	11.86
17	23.85	25.15	24.74	25.68	24.87
107	24.13	25.16	24.55	25.84	24.98
185	24.52	25.54	25.09	25.99	24.78
275	24.25	25.35	24.94	25.90	24.92

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	17.17	15.82	14.50	13.20	11.86
5	620.2	*	617.6	613.3	612.3
95	622.7	619.1	619.4	614.0	609.8
197	625.1	620.0	621.5	613.9	*
287	621.5	617.1	617.9	611.8	609.0

TABLE 60. - TABULATED PRESSURES AND TEMPERATURES FOR ROTOR 2B; UNIFORM FLOW; 100 PERCENT EQUIVALENT DESIGN SPEED; READING NUMBER 18T

Circumferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	11.98	12.79	19.36	14.29
72	11.97	12.89	19.21	14.51
144	11.97	12.82	19.40	14.56
216	11.94	12.81	19.56	14.71
288	11.97	12.83	19.60	14.72

Circumferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.17	15.82	14.50	13.20	11.86	
17	24.96	26.31	25.84	26.42	25.22	
107	25.20	26.18	25.62	26.53	25.26	
185	25.38	26.28	26.13	26.66	24.94	
275	25.42	26.37	26.11	26.54	25.13	

Circumferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.17	15.82	14.50	13.20	11.86	
5	630.6	*	623.8	616.8	612.8	
95	629.8	624.8	623.8	616.5	611.2	
197	631.6	625.5	625.7	616.7	*	
287	629.3	622.6	623.7	615.4	609.9	

TABLE 61. - TABULATED PRESSURES AND TEMPERATURES FOR ROTOR 2B; UNIFORM FLOW; 100 PERCENT EQUIVALENT DESIGN SPEED; READING NUMBER 19T

Circumferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	12.05	12.83	20.26	15.14
72	12.03	12.94	20.09	15.42
144	12.05	12.87	20.20	15.20
216	12.00	12.86	20.43	15.37
288	12.03	12.88	20.51	15.48

Circumferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.17	15.82	14.50	13.20	11.86	
17	26.48	27.52	26.71	26.99	25.66	
107	26.44	27.32	26.56	27.04	25.65	
185	26.28	27.23	26.98	27.10	25.46	
275	26.62	27.50	27.03	26.92	25.67	

Circumferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.17	15.82	14.50	13.20	11.86	
5	640.0	*	629.5	620.1	613.8	
95	639.8	631.3	629.4	619.7	613.2	
197	638.8	631.5	630.3	620.3	*	
287	638.2	629.4	629.2	618.9	611.7	

TABLE 62. - TABULATED PRESSURES AND TEMPERATURES FOR ROTOR 2B; UNIFORM FLOW; 90 PERCENT EQUIVALENT DESIGN SPEED; READING NUMBER 27T

Circumferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	12.26	12.98	13.31	10.26
72	12.27	13.07	13.36	10.44
144	12.23	13.00	13.46	10.50
216	12.22	13.00	13.90	10.86
288	12.25	13.02	13.69	10.76

Circumferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.17	15.82	14.50	13.20	11.86	
17	17.50	18.15	18.12	20.88	22.30	
107	17.78	18.33	18.25	20.83	21.96	
185	17.88	18.52	18.34	21.04	22.39	
275	18.02	18.66	18.41	21.06	22.31	

Circumferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.17	15.82	14.50	13.20	11.86	
5	554.8	*	566.9	578.2	588.8	
95	559.7	568.3	570.8	580.5	587.0	
197	559.0	567.1	569.0	579.1	*	
287	555.1	563.5	567.2	577.8	587.6	

TABLE 63. - TABULATED PRESSURES AND TEMPERATURES FOR ROTOR 2B; UNIFORM FLOW; 90 PERCENT EQUIVALENT DESIGN SPEED; READING NUMBER 28T

Circumferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	12.31	13.02	16.35	12.91
72	12.31	13.11	16.53	13.21
144	12.28	13.04	16.63	13.18
216	12.26	13.03	16.69	13.25
288	12.30	13.05	16.65	13.26

Circumferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.17	15.82	14.50	13.20	11.86	
17	20.81	21.41	21.23	22.62	23.06	
107	21.06	21.77	21.59	22.70	23.00	
185	21.11	21.78	21.84	22.79	23.14	
275	21.04	21.78	21.78	22.77	23.04	

Circumferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.17	15.82	14.50	13.20	11.86	
5	585.7	*	588.1	588.2	591.7	
95	589.0	588.4	590.7	589.7	591.3	
197	587.3	586.8	588.0	587.9	*	
287	587.5	586.3	589.7	588.6	591.3	

TABLE 64. - TABULATED PRESSURES AND TEMPERATURES FOR ROTOR 2B; UNIFORM FLOW; 90 PERCENT EQUIVALENT DESIGN SPEED; READING NUMBER 29T

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	12.32	13.03	16.95	13.25
72	12.32	13.11	16.99	13.62
144	12.29	13.05	17.16	13.62
216	12.27	13.05	17.26	13.69
288	12.31	13.06	17.23	13.76

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
17	21.37	22.06	22.11	22.89	23.02
107	21.55	22.24	22.24	22.98	22.99
185	21.69	22.37	22.60	23.12	23.12
275	21.68	22.39	22.47	23.03	23.02

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
5	590.7	*	593.6	590.7	593.0
95	593.6	592.6	595.4	591.9	592.5
197	593.5	591.0	592.8	591.3	*
287	591.9	589.6	594.3	591.3	592.3

TABLE 65. - TABULATED PRESSURES AND TEMPERATURES FOR ROTOR 2B; UNIFORM FLOW; 90 PERCENT EQUIVALENT DESIGN SPEED; READING NUMBER 30T

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	12.35	13.06	17.68	13.88
72	12.34	13.14	17.67	14.22
144	12.34	13.08	17.83	14.15
216	12.30	13.07	17.83	14.17
288	12.34	13.09	17.80	14.29

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
17	22.24	22.80	22.87	23.23	23.23
107	22.46	22.95	23.02	23.40	23.20
185	22.50	23.10	23.29	23.49	23.28
275	22.44	23.03	23.08	23.33	23.18

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
5	597.4	*	596.3	592.3	593.6
95	597.2	596.2	597.6	593.2	592.9
197	598.3	595.0	597.0	593.0	*
287	597.3	594.1	598.1	592.7	592.2

TABLE 66. - TABULATED PRESSURES AND TEMPERATURES FOR ROTOR 2B; UNIFORM FLOW; 90 PERCENT EQUIVALENT DESIGN SPEED; READING NUMBER 31T

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	12.46	13.16	18.95	14.85
72	12.43	13.24	18.80	15.24
144	12.46	13.18	18.98	15.10
216	12.42	13.19	19.06	15.13
288	12.45	13.19	19.04	15.29

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.17	15.82	14.50	13.20	11.86	
17	23.89	24.23	24.13	23.86	23.72	
107	24.00	24.27	24.12	23.88	23.67	
185	24.14	24.42	24.37	24.03	23.54	
275	24.08	24.34	24.15	23.79	23.63	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.17	15.82	14.50	13.20	11.86	
5	609.6	*	603.5	597.7	597.7	
95	608.5	605.5	603.9	597.1	596.0	
197	610.5	605.8	603.9	597.8	*	
287	609.8	604.7	604.6	597.3	595.4	

TABLE 67. - TABULATED PRESSURES AND TEMPERATURES FOR ROTOR 2B; UNIFORM FLOW; 90 PERCENT EQUIVALENT DESIGN SPEED; READING NUMBER 32T

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	12.55	13.23	19.33	15.30
72	12.53	13.30	19.21	15.60
144	12.53	13.25	19.38	15.44
216	12.52	13.26	19.36	15.45
288	12.54	13.26	19.45	15.66

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.17	15.82	14.50	13.20	11.86	
17	24.43	24.65	24.39	25.05	23.94	
107	24.50	24.78	24.46	24.08	23.94	
185	24.68	24.90	24.59	24.19	23.77	
275	24.59	24.76	24.47	23.99	23.90	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.17	15.82	14.50	13.20	11.86	
5	613.0	*	605.8	599.1	597.6	
95	612.8	609.0	605.7	598.3	597.3	
197	611.7	607.3	604.8	597.9	*	
287	611.6	607.4	605.7	597.2	596.2	

TABLE 68. - TABULATED PRESSURES AND TEMPERATURES FOR ROTOR 2B; UNIFORM FLOW; 70 PERCENT EQUIVALENT DESIGN SPEED; READING NUMBER 44T

Circumferential location, deg	Equivalent wall static pressure, psia				
	Axial distance, Z, in.				
	Inlet, -1.1		Discharge, 3.65		
	Tip	Hub	Tip	Hub	
0	13.07	13.50	13.77	12.05	
72	13.09	13.55	13.79	12.41	
144	13.06	13.52	13.91	12.24	
216	13.06	13.51	14.11	12.52	
288	13.07	13.53	13.93	12.44	

Circumferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	16.44	16.92	17.35	18.69	19.42
17	16.44	16.92	17.35	18.69	19.42
107	16.61	17.08	17.50	18.72	19.32
185	16.70	17.15	17.56	18.74	19.44
275	16.70	17.16	17.58	18.70	19.41

Circumferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	544.0	*	553.1	556.9	562.0
5	544.0	*	553.1	556.9	562.0
95	544.2	546.2	553.8	558.1	561.4
197	545.6	547.7	554.2	558.4	*
287	544.5	546.2	553.9	557.4	561.9

TABLE 69. - TABULATED PRESSURES AND TEMPERATURES FOR ROTOR 2B; UNIFORM FLOW; 70 PERCENT EQUIVALENT DESIGN SPEED; READING NUMBER 45T

Circumferential location, deg	Equivalent wall static pressure, psia				
	Axial distance, Z, in.				
	Inlet, -1.1		Discharge, 3.65		
	Tip	Hub	Tip	Hub	
0	13.20	13.63	15.45	13.36	
72	13.20	13.67	15.45	13.71	
144	13.18	13.64	15.46	13.49	
216	13.17	13.63	15.51	13.63	
288	13.19	13.65	15.49	13.69	

Circumferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	18.23	18.50	18.75	19.22	19.60
17	18.23	18.50	18.75	19.22	19.60
107	18.41	18.61	18.83	19.25	19.51
185	18.32	18.53	18.76	19.18	19.60
275	18.35	18.57	18.80	19.21	19.56

Circumferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	557.6	*	559.6	560.8	563.9
5	557.6	*	559.6	560.8	563.9
95	558.5	557.8	560.3	561.7	563.5
197	558.3	558.2	560.3	561.7	*
287	558.4	557.4	560.5	561.6	563.8

TABLE 70. - TABULATED PRESSURES AND TEMPERATURES FOR ROTOR 2B; UNIFORM FLOW; 70 PERCENT EQUIVALENT DESIGN SPEED; READING NUMBER 46T

Circum-ferential location, deg	Equivalent wall static pressure, psia				
	Axial distance, Z, in.				
	Inlet, -1.1		Discharge, 3.65		
	Tip	Hub	Tip	Hub	
0	13.28	13.69	15.93	13.85	
72	13.29	13.73	15.91	14.13	
144	13.28	13.71	15.97	13.96	
216	13.26	13.70	15.99	14.07	
288	13.28	12.72	15.97	14.13	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	18.80	18.95	19.06	19.40	19.68
17	18.87	19.04	19.12	19.43	19.65
107	18.84	18.99	19.08	19.40	19.75
185	18.85	19.01	19.11	19.41	19.69
275					

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	561.2	*	561.2	562.2	564.9
5	562.6	561.4	562.5	563.3	564.8
95	562.3	561.6	562.4	563.3	*
197	562.9	561.5	563.4	563.6	565.3
287					

TABLE 71. - TABULATED PRESSURES AND TEMPERATURES FOR ROTOR 2B; UNIFORM FLOW; 70 PERCENT EQUIVALENT DESIGN SPEED; READING NUMBER 47T

Circum-ferential location, deg	Equivalent wall static pressure, psia				
	Axial distance, Z, in.				
	Inlet, -1.1		Discharge, 3.65		
	Tip	Hub	Tip	Hub	
0	13.34	13.74	16.19	14.07	
72	13.34	13.78	16.18	14.36	
144	13.34	13.75	16.25	14.22	
216	13.32	13.75	16.24	14.29	
288	13.34	13.76	16.24	14.36	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	19.03	19.20	19.22	19.51	19.75
17	19.13	19.28	19.30	19.54	19.73
107	19.14	19.27	19.27	19.54	19.87
185	19.12	19.26	19.28	19.54	19.77
275					

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	564.2	*	562.7	563.3	565.8
5	564.4	563.3	563.7	563.8	565.2
95	564.7	563.3	563.3	563.7	*
197	564.9	563.2	564.4	564.3	565.7
287					

TABLE 72. - TABULATED PRESSURES AND TEMPERATURES FOR ROTOR 2B; UNIFORM FLOW; 70 PERCENT EQUIVALENT DESIGN SPEED; READING NUMBER 48T

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	13.49	13.85	16.69	14.42
72	13.49	13.88	16.69	14.83
144	13.50	13.86	16.74	14.66
216	13.48	13.85	16.72	14.71
288	13.49	13.86	16.70	14.77

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
17	19.52	19.59	19.48	19.73	19.95
107	19.66	19.70	19.53	19.78	19.98
185	19.59	19.67	19.54	19.78	19.98
275	19.60	19.63	19.46	19.74	19.95

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
5	568.9	*	565.1	565.1	567.5
95	568.5	566.4	565.9	565.2	566.2
197	569.7	566.5	565.4	565.0	*
287	570.2	567.4	567.4	566.3	566.6

TABLE 73. - TABULATED PRESSURES AND TEMPERATURES FOR ROTOR 2B; UNIFORM FLOW; 70 PERCENT EQUIVALENT DESIGN SPEED; READING NUMBER 49T

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	13.65	13.95	17.04	14.82
72	13.64	13.97	17.01	15.04
144	13.64	13.95	17.06	14.95
216	13.63	13.94	17.03	14.97
288	13.65	13.95	17.03	15.03

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
17	19.89	19.75	19.62	19.90	20.11
107	19.93	19.81	19.69	19.94	20.17
185	19.95	19.82	19.71	19.95	20.13
275	19.92	19.74	19.67	19.89	20.12

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
5	574.6	*	568.8	567.6	568.4
95	574.4	569.8	569.3	567.7	568.4
197	576.2	570.5	569.0	567.7	*
287	576.3	571.5	570.8	568.6	568.4

TABLE 74. - TABULATED PRESSURES AND TEMPERATURES FOR ROTOR 2B; UNIFORM FLOW; 70 PERCENT EQUIVALENT DESIGN SPEED; READING NUMBER 50T

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	13.81	14.03	17.18	14.82
72	13.80	14.05	17.15	15.20
144	13.80	14.03	17.21	15.08
216	13.80	14.04	17.16	15.09
288	13.82	14.04	17.17	15.15

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.17	15.82	14.50	13.20	11.86	
	17.17	15.82	14.50	13.20	11.86	
17	19.80	19.80	19.67	19.89	20.18	
107	19.88	19.87	19.73	19.95	20.25	
185	19.90	19.89	19.74	19.97	20.19	
275	19.84	19.81	19.70	19.90	20.20	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.17	15.82	14.50	13.20	11.86	
	17.17	15.82	14.50	13.20	11.86	
5	578.8	*	571.1	568.7	568.7	
95	579.0	573.1	571.4	568.7	568.8	
197	580.2	573.4	571.4	568.6	*	
287	580.3	573.9	572.4	569.6	568.9	

TABLE 75. - TABULATED PRESSURES AND TEMPERATURES FOR ROTOR 2B; UNIFORM FLOW; 90 PERCENT EQUIVALENT DESIGN SPEED; READING NUMBER 52T

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	12.72	13.30	19.70	15.44
72	12.69	13.36	19.53	15.91
144	12.72	13.32	19.65	15.63
216	12.67	13.32	19.69	15.78
288	12.68	13.33	19.78	15.91

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia					
	Radial location, in.					
	17.17	15.82	14.50	13.20	11.86	
	17.17	15.82	14.50	13.20	11.86	
17	24.75	25.02	24.66	24.28	24.09	
107	24.87	25.09	24.66	24.31	24.08	
185	24.78	25.19	24.72	24.35	23.86	
275	24.97	25.12	24.66	24.20	24.02	

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R					
	Radial location, in.					
	17.17	15.82	14.50	13.20	11.86	
	17.17	15.82	14.50	13.20	11.86	
5	621.4	*	608.9	601.7	598.8	
95	620.6	613.2	609.0	601.1	599.4	
197	622.8	613.6	609.2	601.5	*	
287	622.4	614.1	610.0	600.7	598.2	

TABLE 77. - TABULATED PRESSURES AND TEMPERATURES

FOR ROTOR 2B; RADIAL DISTORTION; 70 PERCENT
EQUIVALENT DESIGN SPEED; READING NUMBER 80

Circum-ferential location, deg	Equivalent wall static pressure, psia				
	Axial distance, Z, in.				
	Inlet, -1.1		Discharge, 3.65		
	Tip	Hub	Tip	Hub	
0	12.52	13.81	15.12	12.70	
72	12.53	13.93	16.08	13.03	
144	12.50	13.88	15.27	12.97	
216	12.50	13.85	15.42	13.12	
288	12.51	13.84	15.23	13.05	

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia				
	Radial location, in.				
	17.50	15.67	13.84	11.85	9.44
	13.46	13.64	15.68	15.69	15.37
16	13.56	13.49	15.44	15.64	15.40
106	13.44	13.60	15.29	15.61	15.20
196	13.56	13.53	15.35	15.72	15.24
286					

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	17.71	17.78	18.77	19.56	20.20
17	17.80	18.18	18.00	19.64	20.09
107	17.96	18.11	19.04	19.74	20.32
187	17.91	18.06	18.96	19.62	20.28
275					

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	566.5	*	556.5	557.5	560.6
5	567.2	560.1	555.8	558.8	560.5
95	569.3	562.6	556.9	558.6	*
197	565.6	557.8	555.6	556.7	560.3
287					

TABLE 76. - TABULATED PRESSURES AND TEMPERATURES FOR ROTOR 2B; UNIFORM FLOW; 100 PERCENT
EQUIVALENT DESIGN SPEED; READING NUMBER 53T

Circum-ferential location, deg	Equivalent wall static pressure, psia				
	Axial distance, Z, in.				
	Inlet, -1.1		Discharge, 3.65		
	Tip	Hub	Tip	Hub	
0	12.17	12.90	21.03	15.78	
72	12.12	12.98	20.85	16.01	
144	12.18	12.94	20.89	15.68	
216	12.11	12.92	21.14	16.03	
288	12.13	12.94	21.27	16.08	

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	27.56	28.23	27.48	27.40	26.05
17	27.58	28.12	27.35	27.33	26.01
107	27.29	28.16	27.46	27.45	25.77
185	27.86	28.28	27.46	27.26	25.90
275					

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	648.0	*	633.4	623.2	615.6
5	649.1	638.0	633.9	622.6	615.6
95	650.0	638.3	635.1	623.2	*
197	649.7	637.9	634.7	623.0	615.4
287					

TABLE 78. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 2B; RADIAL DISTORTION; 90 PERCENT
EQUIVALENT DESIGN SPEED; READING NUMBER 81

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	11.39	13.53	15.34	10.73
72	11.42	13.71	*	10.80
144	11.38	13.63	15.56	10.95
216	11.31	13.58	15.77	11.31
288	11.33	13.55	15.64	11.04

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia				
	Radial location, in.				
	17.50	15.67	13.84	11.85	9.44
16	12.87	13.07	16.17	16.21	15.71
106	13.03	12.82	15.67	16.14	15.85
196	12.79	13.00	15.61	16.19	15.52
286	12.94	12.84	15.67	16.24	15.58

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
17	19.57	19.82	20.38	21.45	22.01
107	19.63	20.13	20.18	21.51	21.91
187	19.97	20.28	20.63	21.54	22.16
275	20.10	20.43	20.63	21.57	22.18

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
5	596.2	*	576.7	577.6	584.0
95	598.2	588.3	577.3	581.9	581.5
197	598.3	590.3	578.5	579.4	*
287	595.7	583.9	575.2	576.6	581.9

TABLE 79. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 2B; RADIAL DISTORTION; 100 PERCENT
EQUIVALENT DESIGN SPEED; READING NUMBER 82

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	10.87	13.40	15.35	9.62
72	10.90	13.61	*	9.56
144	10.84	13.52	15.51	9.96
216	10.80	13.45	15.74	10.17
288	10.81	13.42	15.73	10.03

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia				
	Radial location, in.				
	17.50	15.67	13.84	11.85	9.44
16	12.58	12.81	16.29	16.46	15.88
106	12.83	12.49	15.75	16.33	16.06
196	12.48	12.75	15.88	16.44	15.70
286	12.63	12.53	15.81	16.48	15.74

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
17	20.57	20.52	20.47	22.91	22.45
107	20.66	20.66	20.06	22.85	22.51
187	21.09	20.65	20.68	23.17	22.21
275	21.27	20.92	20.71	23.33	22.68

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
5	611.6	*	587.6	590.4	594.9
95	613.2	599.7	589.3	576.5	593.3
197	612.8	600.3	589.6	590.4	*
287	609.1	594.3	585.4	589.1	594.4

TABLE 80. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 2B; RADIAL DISTORTION; 100 PERCENT
EQUIVALENT DESIGN SPEED; READING NUMBER 83

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	11.22	13.38	18.80	12.96
72	11.25	13.55	*	13.13
144	11.27	13.50	18.72	13.16
216	11.16	13.45	18.90	13.50
288	11.14	13.40	18.80	13.33

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia			
	Radial location, in.			
	17.50	15.67	13.84	11.85
16	12.72	12.95	16.28	16.33
106	12.93	12.67	15.69	16.21
196	12.66	12.87	15.71	16.30
286	12.77	12.68	15.75	16.34

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia			
	Radial location, in.			
	17.17	15.82	14.50	13.20
17	24.62	24.61	23.78	24.93
107	24.85	25.17	24.18	25.58
187	24.75	24.74	23.88	25.29
275	25.04	24.92	23.84	25.12

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R			
	Radial location, in.			
	17.17	15.82	14.50	13.20
5	656.3	*	613.4	607.4
95	657.3	632.0	611.6	615.2
197	661.1	634.5	613.1	607.0
287	659.1	632.8	614.0	610.7

TABLE 81. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 2B; RADIAL DISTORTION; 100 PERCENT
EQUIVALENT DESIGN SPEED; READING NUMBER 84

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	11.08	13.40	18.30	12.46
72	11.10	13.55	*	12.51
144	11.08	13.51	18.27	12.62
216	11.02	13.45	18.47	13.01
288	11.01	13.41	18.37	12.79

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia			
	Radial location, in.			
	17.50	15.67	13.84	11.85
16	12.66	12.88	16.30	16.38
106	12.89	12.57	15.69	16.30
196	12.58	12.82	15.79	16.36
286	12.70	12.62	15.78	16.39

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia			
	Radial location, in.			
	17.17	15.82	14.50	13.20
17	24.07	24.05	23.17	24.43
107	24.20	24.42	23.52	24.97
187	24.38	24.19	23.41	24.72
275	24.49	24.29	23.34	24.60

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R			
	Radial location, in.			
	17.17	15.82	14.50	13.20
5	648.1	*	608.1	603.4
95	648.6	625.9	608.1	605.2
197	654.1	628.5	609.9	604.2
287	645.1	624.3	606.8	605.2

TABLE 82. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 2B; RADIAL DISTORTION; 100 PERCENT
EQUIVALENT DESIGN SPEED; READING NUMBER 85

Circum-ferential location, deg	Equivalent wall static pressure, psia				
	Axial distance, Z, in.				
	Inlet, -1.1		Discharge, 3.65		
	Tip	Hub	Tip	Hub	Hub
0	10.98	13.40	17.59	11.83	
72	11.00	13.59	*	11.80	
144	10.96	13.52	17.60	11.85	
216	10.90	13.45	17.88	12.26	
288	10.92	13.42	17.75	12.17	

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia				
	Radial location, in.				
	17.50	15.67	13.84	11.85	9.44
	12.61	12.84	16.31	16.41	15.88
16	12.85	12.54	15.69	16.33	16.04
106	12.53	12.78	15.84	16.41	15.68
196	12.65	12.58	15.78	16.44	15.74
286					

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	23.40	23.25	22.30	23.92	25.59
17	23.37	23.40	22.63	24.29	25.46
107	23.66	23.36	22.62	24.11	25.53
187	23.75	23.60	22.59	24.06	25.64
275					

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	637.3	*	603.5	601.5	607.4
5	640.7	621.1	604.7	*	605.6
95	642.6	621.5	605.2	602.0	*
197	635.5	617.0	602.7	601.6	607.6
287					

TABLE 83. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 2B; RADIAL DISTORTION; 100 PERCENT
EQUIVALENT DESIGN SPEED; READING NUMBER 86

Circum-ferential location, deg	Equivalent wall static pressure, psia				
	Axial distance, Z, in.				
	Inlet, -1.1		Discharge, 3.65		
	Tip	Hub	Tip	Hub	Hub
0	10.91	13.41	16.68	10.99	
72	10.93	13.60	*	10.97	
144	10.90	13.53	16.79	11.10	
216	10.85	13.46	17.02	11.40	
288	10.86	13.43	16.90	11.29	

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia				
	Radial location, in.				
	17.50	15.67	13.84	11.85	9.44
	12.60	12.80	16.30	16.42	15.88
16	12.86	12.51	15.70	16.35	16.05
106	12.52	12.75	15.86	16.42	15.69
196	12.63	12.58	15.80	16.47	15.75
286					

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	22.25	22.05	21.37	23.39	24.68
17	22.30	22.15	21.45	23.51	24.37
107	22.62	22.43	21.70	23.57	24.53
187	22.54	22.47	21.63	23.45	24.87
275					

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	626.2	*	595.2	596.6	604.5
5	625.8	610.5	596.9	*	603.0
95	631.1	611.7	597.6	597.1	*
197	623.8	605.3	594.1	595.5	604.2
287					

TABLE 84. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 2B; RADIAL DISTORTION; 90 PERCENT
EQUIVALENT DESIGN SPEED; READING NUMBER 87

Circum-ferential location, deg	Equivalent wall static pressure, psia				
	Axial distance, Z, in.				
	Inlet, -1.1		Discharge, 3.65		
	Tip	Hub	Tip	Hub	
0	11.75	13.54	17.91	13.31	
72	11.75	13.68	*	13.53	
144	11.78	13.64	17.80	13.42	
216	11.65	13.58	17.98	13.69	
288	11.67	13.55	17.96	13.57	

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia				
	Radial location, in.				
	17.50	15.67	13.84	11.85	9.44
	16	12.97	13.17	16.07	16.11
106	13.18	12.99	15.64	16.04	15.74
196	12.98	13.12	15.48	16.06	15.46
286	13.06	13.00	15.59	16.12	15.52

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
17	22.37	22.49	23.02	23.55	23.94
107	22.50	22.80	23.14	23.75	23.86
187	22.37	22.51	23.02	23.52	23.94
275	22.70	22.63	22.99	23.63	23.96

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	5	627.5	*	594.9	589.8
95	628.1	608.8	594.3	*	590.5
197	631.1	610.4	595.2	589.8	*
287	628.2	608.3	594.0	589.0	589.9

TABLE 85. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 2B; RADIAL DISTORTION; 90 PERCENT
EQUIVALENT DESIGN SPEED; READING NUMBER 88

Circum-ferential location, deg	Equivalent wall static pressure, psia				
	Axial distance, Z, in.				
	Inlet, -1.1		Discharge, 3.65		
	Tip	Hub	Tip	Hub	
0	11.61	13.55	17.40	12.73	
72	11.62	13.68	*	12.94	
144	11.59	13.64	17.38	12.93	
216	11.49	13.58	17.56	13.28	
288	11.53	13.56	17.54	13.09	

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia				
	Radial location, in.				
	17.50	15.67	13.84	11.85	9.44
	16	12.93	13.12	16.13	16.15
106	13.11	12.91	15.63	16.12	15.78
196	12.90	13.05	15.49	16.12	15.49
286	12.99	12.93	15.62	16.17	15.57

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	17	21.91	22.11	22.34	22.96
107	22.09	22.26	22.44	23.27	23.36
187	22.06	22.23	22.46	23.02	23.70
275	22.31	22.27	22.49	23.23	23.79

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	5	620.1	*	590.4	587.9
95	620.6	604.0	590.7	*	588.0
197	624.1	605.3	591.1	587.4	*
287	617.1	602.5	589.16	586.8	588.7

TABLE 86. - TABULATED PRESSURES AND TEMPERATURES

FOR ROTOR 2B; RADIAL DISTORTION; 90 PERCENT

EQUIVALENT DESIGN SPEED; READING NUMBER 89

Circum-ferential location, deg	Equivalent wall static pressure, psia				
	Axial distance, Z, in.				
	Inlet, -1.1		Discharge, 3.65		
	Tip	Hub	Tip	Hub	
0	11.53	13.54	16.98	12.28	
72	11.55	13.69	*	12.50	
144	11.51	13.64	17.03	12.54	
216	11.43	13.58	17.18	12.83	
288	11.47	13.56	17.12	12.69	

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia				
	Radial location, in.				
	17.50	15.67	13.84	11.85	9.44
16	12.89	13.10	16.16	16.18	15.70
106	13.09	12.88	15.63	16.14	15.79
196	12.88	13.03	15.50	16.15	15.51
286	12.98	12.91	15.63	16.18	15.57

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
17	21.48	21.75	21.86	22.42	22.90
107	21.61	21.82	21.90	22.78	22.97
187	21.80	21.89	21.97	22.51	23.38
275	21.86	22.04	22.05	22.79	23.33

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
5	613.8	*	587.1	585.6	587.9
95	616.3	601.6	588.4	*	586.9
197	618.0	602.6	588.8	585.3	*
287	612.8	598.7	586.3	584.5	587.8

TABLE 87. - TABULATED PRESSURES AND TEMPERATURES

FOR ROTOR 2B; RADIAL DISTORTION; 90 PERCENT

EQUIVALENT DESIGN SPEED; READING NUMBER 90

Circum-ferential location, deg	Equivalent wall static pressure, psia				
	Axial distance, Z, in.				
	Inlet, -1.1		Discharge, 3.65		
	Tip	Hub	Tip	Hub	
0	11.52	13.62	16.56	11.82	
72	11.54	13.78	*	11.98	
144	11.52	13.71	16.69	12.07	
216	11.43	13.65	16.80	12.40	
288	11.47	13.63	16.71	12.15	

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia				
	Radial location, in.				
	17.50	15.67	13.84	11.85	9.44
16	12.95	13.12	-----	16.27	15.82
106	13.15	12.91	15.72	16.26	15.90
196	12.91	13.08	15.61	16.26	15.62
286	13.02	12.94	15.73	16.30	15.68

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
17	20.97	21.29	21.50	22.01	22.71
107	21.15	21.40	21.42	22.31	22.70
187	21.41	21.64	21.63	22.11	23.12
275	21.33	21.71	21.58	22.42	22.96

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
5	608.4	*	582.8	582.3	586.1
95	607.4	596.2	584.2	*	584.4
197	613.1	598.3	585.1	582.3	*
287	606.9	593.0	582.8	581.5	585.5

TABLE 88. - TABULATED PRESSURES AND TEMPERATURES

FOR ROTOR 2B; RADIAL DISTORTION; 70 PERCENT

EQUIVALENT DESIGN SPEED; READING NUMBER 91

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	12.58	13.83	*	13.00
72	12.59	13.94	16.06	13.30
144	12.58	13.90	15.50	13.18
216	12.58	13.87	15.57	13.26
288	12.57	13.86	15.48	13.28

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia			
	Radial location, in.			
	17.50	15.67	13.84	11.85
16	13.48	13.63	15.66	15.66
106	13.61	13.52	15.41	15.66
196	13.50	13.61	15.25	15.59
286	13.56	13.58	15.35	15.69

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia			
	Radial location, in.			
	17.17	15.82	14.50	13.20
17	18.05	18.09	18.99	19.70
107	18.03	18.23	19.02	19.74
187	18.20	18.32	19.20	19.78
275	18.14	18.28	19.09	19.71

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R			
	Radial location, in.			
	17.17	15.82	14.50	13.20
5	570.1	*	557.6	559.1
95	570.0	562.0	556.7	*
197	573.2	564.6	558.1	559.0
287	568.0	560.1	556.5	557.6

TABLE 89. - TABULATED PRESSURES AND TEMPERATURES

FOR ROTOR 2B; RADIAL DISTORTION; 70 PERCENT

EQUIVALENT DESIGN SPEED; READING NUMBER 92

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	12.67	13.86	15.71	13.23
72	12.70	13.96	16.00	13.56
144	12.68	13.93	15.78	13.45
216	12.67	13.89	15.82	13.47
288	12.66	13.88	15.74	13.54

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia			
	Radial location, in.			
	17.50	15.67	13.84	11.85
16	13.54	13.69	15.60	15.62
106	13.64	13.57	15.38	15.61
196	13.56	13.66	15.23	15.55
286	13.60	13.62	15.34	15.64

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia			
	Radial location, in.			
	17.17	15.82	14.50	13.20
17	18.31	18.39	19.18	19.78
107	18.34	18.44	19.23	19.81
187	18.49	18.58	19.28	19.87
275	18.45	18.58	19.23	19.82

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R			
	Radial location, in.			
	17.17	15.82	14.50	13.20
5	573.5	*	558.3	559.5
95	573.5	564.2	558.0	*
197	577.0	567.4	559.6	560.0
287	572.3	563.1	558.1	558.6

TABLE 90. - TABULATED PRESSURES AND TEMPERATURES

FOR ROTOR 2B; RADIAL DISTORTION; 70 PERCENT

EQUIVALENT DESIGN SPEED; READING NUMBER 93

Circum-ferential location, deg	Equivalent wall static pressure, psia				
	Axial distance, Z, in.				
	Inlet, -1.1		Discharge, 3.65		
	Tip	Hub	Tip	Hub	
0	12.79	13.89	16.03	13.54	
72	12.82	13.98	15.93	13.86	
144	12.79	13.95	16.05	13.69	
216	12.77	13.92	16.08	13.73	
288	12.78	13.91	*	13.84	

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia				
	Radial location, in.				
	17.50	15.67	13.84	11.85	9.44
	13.60	13.74	15.56	15.57	15.31
16	13.60	13.74	15.56	15.57	15.31
106	13.70	13.64	15.35	15.56	15.28
196	13.62	13.72	15.20	15.50	15.14
286	13.67	13.68	15.32	15.58	15.19

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	18.63	18.69	19.38	19.87	20.38
17	18.63	18.69	19.38	19.87	20.38
107	18.74	18.73	19.40	19.92	20.22
187	18.74	18.80	19.40	19.93	20.29
275	18.74	18.83	19.41	19.91	20.31

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	577.3	*	559.8	560.5	562.1
5	577.3	*	559.8	560.5	562.1
95	577.9	567.1	559.0	*	562.2
197	580.2	568.9	559.7	560.3	*
287	576.8	566.5	559.2	559.7	562.6

TABLE 91. - TABULATED PRESSURES AND TEMPERATURES

FOR ROTOR 2B; RADIAL DISTORTION; 70 PERCENT

EQUIVALENT DESIGN SPEED; READING NUMBER 94

Circum-ferential location, deg	Equivalent wall static pressure, psia				
	Axial distance, Z, in.				
	Inlet, -1.1		Discharge, 3.65		
	Tip	Hub	Tip	Hub	
0	12.96	13.93	16.40	13.89	
72	12.97	14.02	15.82	14.21	
144	12.95	13.99	16.36	14.00	
216	12.95	13.97	16.45	14.07	
288	12.94	13.95	16.41	14.17	

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia				
	Radial location, in.				
	17.50	15.67	13.84	11.85	9.44
	13.69	13.82	15.47	15.50	15.26
16	13.69	13.82	15.47	15.50	15.26
106	13.78	13.73	15.29	15.48	15.22
196	13.71	13.79	15.19	15.42	15.09
286	13.77	13.77	15.28	15.50	15.15

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	19.02	19.03	19.54	20.02	20.39
17	19.02	19.03	19.54	20.02	20.39
107	19.09	19.11	19.62	20.04	20.25
187	19.06	19.12	19.62	20.01	20.38
275	19.11	19.10	19.60	19.98	20.33

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	582.8	*	561.2	561.9	563.7
5	582.8	*	561.2	561.9	563.7
95	584.4	571.6	561.3	*	563.8
197	586.1	573.4	563.0	562.9	*
287	581.6	571.0	561.2	*	563.6

TABLE 92. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 2B; CIRCUMFERENTIAL DISTORTION; 70 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 95

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	13.48	13.95	14.74	12.52
72	13.42	13.92	15.74	13.15
144	13.05	13.58	14.69	12.53
216	12.44	12.90	16.36	14.55
288	13.55	14.04	15.57	13.71

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia				
	Radial location, in.				
	17.50	15.67	13.84	11.85	9.44
16	14.86	15.28	14.97	15.04	15.09
106	15.04	14.99	14.92	15.04	15.10
196	13.43	13.38	13.31	13.39	13.79
286	15.13	15.37	15.30	15.22	15.26

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in				
	17.17	15.82	14.50	13.20	11.86
17	17.53	17.99	18.37	19.26	19.82
107	17.53	18.01	18.46	19.43	20.08
185	18.03	18.00	18.28	18.26	17.88
275	19.08	19.28	19.27	19.78	20.91

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
5	549.1	*	554.1	555.5	559.5
95	558.7	558.1	560.5	*	567.8
197	576.5	571.7	570.2	569.0	*
287	549.1	549.6	555.6	557.1	560.8

TABLE 93. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 2B; CIRCUMFERENTIAL DISTORTION; 90 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 96

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	12.90	13.71	15.89	12.10
72	12.83	13.66	16.43	10.73
144	12.17	13.07	14.66	11.07
216	10.98	11.76	18.34	15.18
288	12.83	13.68	18.15	14.78

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia				
	Radial location, in.				
	17.50	15.67	13.84	11.85	9.44
16	15.05	15.56	15.23	15.30	15.41
106	15.27	15.20	15.11	15.29	15.47
196	12.58	12.57	12.28	12.49	13.06
286	15.42	15.83	15.70	15.50	15.61

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in				
	17.17	15.82	14.50	13.20	11.86
17	20.72	21.12	21.16	23.08	23.89
107	19.08	19.80	19.38	22.32	23.73
185	20.14	19.94	19.40	19.42	18.69
275	23.71	24.15	26.38	25.98	26.09

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
5	579.9	*	583.8	585.2	589.2
95	611.7	604.5	608.0	*	608.4
197	616.5	610.1	603.8	592.2	*
287	563.4	569.6	572.8	579.9	587.9

TABLE 94. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 2B; CIRCUMFERENTIAL DISTORTION; 100 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 97

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	12.59	13.58	16.85	11.80
72	12.57	13.55	16.74	10.92
144	11.74	12.84	14.50	10.44
216	10.30	11.24	19.04	15.19
288	12.50	13.48	18.97	14.96

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia			
	Radial location, in.			
	17.50	15.67	13.84	11.85
16	15.17	15.68	15.36	15.46
106	15.36	15.30	15.22	15.43
196	12.21	12.22	11.81	12.02
286	15.54	16.02	15.84	15.62

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia			
	Radial location, in			
	17.17	15.82	14.50	13.20
17	22.17	23.04	22.78	25.54
107	19.64	20.88	20.32	24.18
185	21.44	21.06	19.84	19.60
275	25.68	25.83	29.41	29.49

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R			
	Radial location, in.			
	17.17	15.82	14.50	13.20
5	599.5	*	598.6	601.9
95	646.5	632.2	634.0	*
197	643.6	630.6	618.2	605.9
287	573.1	581.3	583.9	594.5

TABLE 95. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 2B; CIRCUMFERENTIAL DISTORTION; 100 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 98

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	12.66	13.60	18.96	13.79
72	12.52	13.52	16.66	12.93
144	11.73	12.83	15.58	11.22
216	10.80	11.50	20.00	15.90
288	13.12	13.70	19.88	15.69

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia			
	Radial location, in.			
	17.50	15.67	13.84	11.85
16	15.08	15.72	15.25	15.34
106	15.29	15.25	15.14	15.32
196	12.29	12.38	12.03	12.21
286	15.64	15.82	15.68	15.73

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia			
	Radial location, in			
	17.17	15.82	14.50	13.20
17	25.16	25.74	25.34	26.69
107	22.40	23.15	22.83	25.14
185	22.57	22.04	20.53	20.53
275	25.54	25.72	29.68	29.78

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R			
	Radial location, in.			
	17.17	15.82	14.50	13.20
5	616.3	*	612.4	609.4
95	689.1	654.7	641.5	*
197	646.5	634.7	622.7	605.8
287	600.2	597.1	600.1	601.3

TABLE 96. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 2B; CIRCUMFERENTIAL DISTORTION; 100 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 99

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	12.61	13.57	17.80	12.72
72	12.55	13.54	16.68	11.74
144	11.74	12.84	15.02	10.73
216	10.52	11.35	19.54	15.57
288	12.72	13.56	19.43	15.40

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia			
	Radial location, in.			
	17.50	15.67	13.84	11.85
16	15.13	15.69	15.29	15.39
106	15.33	15.29	15.18	15.37
196	12.28	12.33	11.86	12.12
286	15.58	15.94	15.80	15.67

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia			
	Radial location, in			
	17.17	15.82	14.50	13.20
17	23.76	24.20	24.13	26.08
107	20.78	21.92	21.18	24.58
185	22.01	21.42	20.13	20.11
275	25.51	25.90	29.68	29.60

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R			
	Radial location, in.			
	17.17	15.82	14.50	13.20
5	608.5	*	605.7	605.6
95	681.4	642.9	638.0	*
197	643.0	631.3	619.4	605.5
287	584.5	589.6	590.4	596.7

TABLE 97. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 2B; CIRCUMFERENTIAL DISTORTION; 100 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 100

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	12.61	13.58	18.18	13.03
72	12.54	13.52	16.69	12.02
144	11.73	12.83	15.21	10.90
216	10.60	11.40	19.71	15.70
288	12.84	13.60	19.63	15.52

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia			
	Radial location, in.			
	17.50	15.67	13.84	11.85
16	15.11	15.69	15.29	15.39
106	15.30	15.27	15.16	15.34
196	12.31	12.36	11.92	12.16
286	15.60	15.90	15.76	15.68

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia			
	Radial location, in			
	17.17	15.82	14.50	13.20
17	24.26	24.76	24.55	26.28
107	21.25	22.24	21.58	24.70
185	22.24	21.64	20.23	20.25
275	25.38	25.86	29.72	29.68

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R			
	Radial location, in.			
	17.17	15.82	14.50	13.20
5	611.1	*	608.0	606.9
95	686.7	647.9	639.1	*
197	644.6	633.2	621.4	606.0
287	589.3	592.3	593.2	597.8

TABLE 98. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 2B; CIRCUMFERENTIAL DISTORTION; 100 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 101

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	12.64	13.58	18.50	13.33
72	12.53	13.53	16.65	12.32
144	11.73	12.83	15.37	11.04
216	10.70	11.44	19.83	15.78
288	12.96	13.64	19.76	15.59

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia			
	Radial location, in.			
	17.50	15.67	13.84	11.85
16	15.10	15.68	15.26	15.37
106	15.29	15.26	15.14	15.34
196	12.30	12.38	11.99	12.20
286	15.61	15.83	15.73	15.70

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia			
	Radial location, in			
	17.17	15.82	14.50	13.20
17	24.53	25.21	24.90	26.39
107	21.66	22.55	21.97	24.80
185	22.39	21.82	20.29	20.34
275	25.36	25.73	29.70	29.10

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R			
	Radial location, in.			
	17.17	15.82	14.50	13.20
5	612.7	*	609.8	608.0
95	689.3	651.3	640.0	*
197	645.7	634.0	621.7	605.7
287	593.7	593.9	595.1	598.5

TABLE 99. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 2B; CIRCUMFERENTIAL DISTORTION; 100 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 102

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	12.80	13.66	19.38	14.33
72	12.53	13.51	16.63	13.71
144	11.74	12.83	15.98	11.21
216	10.86	11.52	20.20	16.04
288	13.42	13.76	19.83	15.76

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia			
	Radial location, in.			
	17.50	15.67	13.84	11.85
16	15.08	15.75	15.23	15.36
106	15.27	15.25	15.13	15.30
196	12.31	12.44	12.11	12.23
286	15.63	15.81	15.63	15.69

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia			
	Radial location, in			
	17.17	15.82	14.50	13.20
17	25.75	26.30	25.84	27.05
107	23.53	24.18	24.03	25.98
185	22.56	22.21	20.66	20.81
275	25.82	25.82	29.75	29.83

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R			
	Radial location, in.			
	17.17	15.82	14.50	13.20
5	630.7	*	615.7	611.2
95	684.8	654.9	642.3	*
197	646.6	634.9	623.1	602.4
287	609.4	602.6	608.1	605.3

TABLE 100. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 2B; CIRCUMFERENTIAL DISTORTION; 90 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 103

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	13.30	13.88	18.44	14.45
72	12.92	13.68	16.25	14.35
144	12.19	13.11	16.110	12.10
216	11.59	12.08	19.40	15.88
288	13.70	13.92	18.93	15.56

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia				
	Radial location, in.				
	17.50	15.67	13.84	11.85	9.44
16	15.02	15.63	15.09	15.25	15.48
106	15.16	15.17	15.06	15.14	15.29
196	12.74	12.88	12.64	12.69	13.21
286	15.39	15.62	15.46	12.50	15.49

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in				
	17.17	15.82	14.50	13.20	11.86
17	23.41	23.77	23.91	24.31	24.40
107	22.50	22.98	23.15	23.83	24.00
185	21.50	21.42	20.59	20.58	19.72
275	24.14	24.01	26.51	26.03	26.28

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
5	611.3	*	596.3	592.7	591.9
95	647.9	623.5	614.5	*	611.6
197	623.6	615.8	608.9	591.3	*
287	594.0	589.8	592.6	589.1	590.6

TABLE 101. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 2B; CIRCUMFERENTIAL DISTORTION; 90 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 104

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	12.92	13.72	16.68	12.76
72	12.82	13.65	16.38	12.54
144	12.15	13.07	15.13	11.46
216	11.20	11.86	18.76	15.47
288	12.98	13.74	18.60	15.18

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia				
	Radial location, in.				
	17.50	15.67	13.84	11.85	9.44
16	15.04	15.57	15.20	15.26	15.36
106	15.23	15.16	15.08	15.25	15.44
196	12.65	12.72	12.37	12.56	13.10
286	15.42	15.72	15.66	15.53	15.60

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in				
	17.17	15.82	14.50	13.20	11.86
17	21.33	21.94	22.22	23.44	23.91
107	19.98	20.61	20.23	22.73	23.90
185	20.62	20.40	19.70	19.73	19.02
275	23.64	24.19	26.50	26.05	25.94

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
5	586.0	*	586.4	586.3	589.4
95	635.3	612.2	610.0	*	609.7
197	619.2	612.4	605.5	591.3	*
287	572.0	576.2	578.3	583.1	588.7

TABLE 102. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 2B; CIRCUMFERENTIAL DISTORTION; 90 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 105

Circum-ferential location, deg	Equivalent wall static pressure, psia				
	Axial distance, Z, in.				
	Inlet, -1.1		Discharge, 3.65		
	Tip	Hub	Tip	Hub	Hub
0	12.99	13.75	17.50	13.46	13.46
72	12.83	13.64	16.34	13.07	13.07
144	12.16	13.06	15.53	11.80	11.80
216	11.39	11.97	19.10	15.67	15.67
288	13.19	13.82	18.91	15.41	15.41

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia				
	Radial location, in.				
	17.50	15.67	13.84	11.85	9.44
16	15.01	15.60	15.15	15.22	15.38
106	15.20	15.14	15.06	15.21	15.38
196	12.68	12.78	12.52	12.60	13.14
286	15.44	15.66	15.59	15.56	15.60

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in				
	17.17	15.82	14.50	13.20	11.86
17	22.48	22.90	23.09	23.69	24.02
107	20.87	21.24	21.17	23.15	23.88
185	21.13	20.89	20.08	20.11	19.37
275	23.65	23.99	26.59	26.11	26.02

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
5	592.8	*	590.4	588.9	590.0
95	651.5	619.8	612.4	*	610.2
197	622.5	615.3	608.3	591.7	*
287	579.3	580.1	584.2	585.0	589.6

TABLE 103. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 2B; CIRCUMFERENTIAL DISTORTION; 90 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 106

Circum-ferential location, deg	Equivalent wall static pressure, psia				
	Axial distance, Z, in.				
	Inlet, -1.1		Discharge, 3.65		
	Tip	Hub	Tip	Hub	Hub
0	13.10	13.79	18.07	14.01	14.01
72	12.84	13.65	16.31	13.69	13.69
144	12.16	13.08	15.82	11.99	11.99
216	11.52	12.05	19.30	15.81	15.81
288	13.50	13.89	18.82	15.45	15.45

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia				
	Radial location, in.				
	17.50	15.67	13.84	11.85	9.44
16	15.01	15.62	15.11	15.21	15.42
106	15.18	15.14	15.05	15.19	15.35
196	12.69	12.85	12.61	12.64	13.17
286	15.41	15.61	15.51	15.55	15.58

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in				
	17.17	15.82	14.50	13.20	11.86
17	23.05	23.44	23.58	24.05	24.22
107	21.59	22.00	22.16	23.51	23.90
185	21.41	21.22	20.34	20.45	19.64
275	23.82	23.76	26.48	26.09	26.20

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
5	599.0	*	593.1	590.6	590.1
95	649.6	621.2	612.5	*	610.2
197	623.8	616.0	609.2	591.6	*
287	585.0	584.3	588.8	586.4	589.4

TABLE 104. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 2B; CIRCUMFERENTIAL DISTORTION; 70 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 107

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	14.03	14.27	17.18	14.88
72	13.84	14.18	15.40	14.93
144	13.44	13.87	16.19	13.91
216	13.22	13.42	17.25	15.21
288	14.14	14.30	17.20	15.18

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia				
	Radial location, in.				
	17.50	15.67	13.84	11.85	9.44
16	14.83	15.17	14.84	14.96	15.12
106	14.92	14.97	14.90	14.84	14.89
196	13.75	13.88	13.82	13.79	14.02
286	14.98	15.16	15.04	15.05	14.98

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in				
	17.17	15.82	14.50	13.20	11.86
17	19.94	19.92	19.78	20.04	20.44
107	19.80	19.76	19.63	19.99	20.16
185	19.34	19.29	19.00	18.70	18.42
275	19.98	19.69	20.37	20.54	21.35

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
5	577.5	*	566.9	565.6	566.1
95	598.9	588.2	582.8	*	577.6
197	581.5	574.5	572.1	564.4	*
287	570.2	565.0	565.5	564.2	564.6

TABLE 105. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 2B; CIRCUMFERENTIAL DISTORTION; 70 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 108

Circum-ferential location, deg	Equivalent wall static pressure, psia			
	Axial distance, Z, in.			
	Inlet, -1.1		Discharge, 3.65	
	Tip	Hub	Tip	Hub
0	13.54	14.01	15.38	13.16
72	13.44	13.94	15.72	13.62
144	13.07	13.60	14.95	12.72
216	12.54	12.96	16.65	14.80
288	13.64	14.10	16.09	14.17

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia				
	Radial location, in.				
	17.50	15.67	13.84	11.85	9.44
16	14.84	15.30	14.95	15.01	15.12
106	15.03	14.95	14.91	14.99	15.07
196	13.44	13.52	13.40	13.44	13.78
286	15.11	15.34	15.27	15.20	15.24

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in				
	17.17	15.82	14.50	13.20	11.86
17	18.28	18.60	18.89	19.47	19.90
107	18.18	18.60	18.89	19.61	20.07
185	18.24	18.22	18.43	18.27	17.84
275	19.32	19.46	19.71	20.14	21.06

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
5	553.1	*	555.1	557.1	560.6
95	564.8	563.1	566.3	*	571.0
197	577.2	572.1	570.7	569.0	*
287	553.0	552.8	557.2	558.6	561.8

TABLE 106. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 2B; CIRCUMFERENTIAL DISTORTION; 70 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 109

Circum-ferential location, deg	Equivalent wall static pressure, psia				
	Axial distance, Z, in.				
	Inlet, -1.1				
	Tip	Hub	Tip	Hub	Hub
0	13.71	14.12	16.20	13.94	
72	13.55	14.02	15.59	14.12	
144	13.18	13.70	15.54	13.26	
216	12.83	13.15	17.05	15.10	
288	13.88	14.20	16.66	14.70	

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia				
	Radial location, in.				
	17.50	15.67	13.84	11.85	9.44
	14.83	15.29	14.88	14.98	15.14
16	14.99	14.94	14.89	14.93	14.99
106	13.55	13.67	13.60	13.56	13.85
196	15.06	15.28	15.19	15.14	15.16
286					

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in				
	17.17	15.82	14.50	13.20	11.86
	19.11	19.28	19.30	19.71	20.03
17	19.00	19.15	19.36	19.80	20.05
107	18.85	18.68	18.81	18.61	18.06
185	19.48	19.53	20.32	20.45	21.29
275					

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	560.7	*	558.7	560.2	561.7
5	575.3	573.1	574.9	*	575.0
95	579.6	573.1	572.1	568.4	*
197	558.9	557.9	559.4	560.2	562.7
287					

TABLE 107. - TABULATED PRESSURES AND TEMPERATURES
FOR ROTOR 2B; CIRCUMFERENTIAL DISTORTION; 70 PER-
CENT EQUIVALENT DESIGN SPEED; READING NUMBER 110

Circum-ferential location, deg	Equivalent wall static pressure, psia				
	Axial distance, Z, in.				
	Inlet, -1.1				
	Tip	Hub	Tip	Hub	Hub
0	13.90	14.22	16.88	14.62	
72	13.73	14.12	15.48	14.68	
144	13.33	13.80	15.92	13.64	
216	13.06	13.31	17.22	15.21	
288	14.04	14.28	17.06	15.06	

Circum-ferential location, deg	Equivalent inlet total pressure (at Z = -3.0 in.), psia				
	Radial location, in.				
	17.50	15.67	13.84	11.85	9.44
	14.84	15.24	14.85	14.98	15.13
16	14.96	14.95	14.89	14.88	14.92
106	13.66	13.80	13.73	13.69	13.95
196	15.00	15.22	15.10	15.09	15.05
286					

Circum-ferential location, deg	Equivalent discharge total pressure (at Z = 8.9 in.), psia				
	Radial location, in				
	17.17	15.82	14.50	13.20	11.86
	19.84	19.71	19.58	19.96	20.28
17	19.52	19.62	19.53	19.89	20.04
107	19.09	19.11	18.82	18.78	18.18
185	19.75	19.66	20.40	20.50	21.37
275					

Circum-ferential location, deg	Equivalent discharge total temperature (at Z = 8.9 in.), °R				
	Radial location, in.				
	17.17	15.82	14.50	13.20	11.86
	569.8	-----	564.1	563.4	564.3
5	588.8	581.8	580.4	*	577.2
95	581.6	574.4	571.8	565.8	*
197	565.0	562.0	562.4	562.4	563.6
287					

POSTMASTER: If Undeliverable (Section 158
Postal Manual) Do Not Return

"The aeronautical and space activities of the United States shall be conducted so as to contribute . . . to the expansion of human knowledge of phenomena in the atmosphere and space. The Administration shall provide for the widest practicable and appropriate dissemination of information concerning its activities and the results thereof."

— NATIONAL AERONAUTICS AND SPACE ACT OF 1958

NASA SCIENTIFIC AND TECHNICAL PUBLICATIONS

TECHNICAL REPORTS: Scientific and technical information considered important, complete, and a lasting contribution to existing knowledge.

TECHNICAL NOTES: Information less broad in scope but nevertheless of importance as a contribution to existing knowledge.

TECHNICAL MEMORANDUMS: Information receiving limited distribution because of preliminary data, security classification, or other reasons.

CONTRACTOR REPORTS: Scientific and technical information generated under a NASA contract or grant and considered an important contribution to existing knowledge.

TECHNICAL TRANSLATIONS: Information published in a foreign language considered to merit NASA distribution in English.

SPECIAL PUBLICATIONS: Information derived from or of value to NASA activities. Publications include conference proceedings, monographs, data compilations, handbooks, sourcebooks, and special bibliographies.

TECHNOLOGY UTILIZATION PUBLICATIONS: Information on technology used by NASA that may be of particular interest in commercial and other non-aerospace applications. Publications include Tech Briefs, Technology Utilization Reports and Notes, and Technology Surveys.

Details on the availability of these publications may be obtained from:

SCIENTIFIC AND TECHNICAL INFORMATION DIVISION
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
Washington, D.C. 20546